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AL RAMAIAH

Date of Birth — Date de naissance October 09, 1943	Country of Birth — Lieu de naissance INDIA

Permanent Address — Résidence fixe

FACULTY OF EDUCATION, UNIVERSITY OF MALAYA,
KUALA LUMPUR, MALAYSIA

Title of Thesis — Titre de la thèse

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by

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(SIGNED) AL. Ramaiah

PERMANENT ADDRESS:
Faculty of Education
University of Malaya
KUALA LUMPUR, Malaysia

DATED December 02, 1983

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled A STUDY OF THE PERCEIVED NEED FOR INSTRUCTIONAL DEVELOPMENT AT THE UNIVERSITY OF MALAYA submitted by AL RAMAIAH in partial fulfilment of the requirements for the degree of DOCTOR OF PHILOSOPHY.

James M Small

Supervisor

D.R. Wilson

K. Ward

E. Miklos

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External Examiner

Date November 28, 1983

ABSTRACT

The present study was designed to determine the nature and extent of the need for instructional development at the University of Malaya as perceived by academic staff at this institution. More specifically, the purpose of the study was to determine the perceptions of needs relative to specified objectives, methods, organizational arrangements and issues, and obstacles in instructional development.

In addition, the study attempted to discern differences in the perceptions of need for instructional development held by various sub-groups of academic staff.

A questionnaire and an interview guide, based on the conceptual framework, were developed and used to collect data for the study. A total of 169 out of 211 individuals (81 percent), randomly chosen for the study from all of the eight faculties and two centres at the University of Malaya responded to the survey. Thirty interviews were held with administrators and instructors chosen randomly. These individuals were not included in the questionnaire sample.

It is evident from the findings that there is a need for instructional development at the University of Malaya, and furthermore that attention needs to be paid to focussing on priority objectives, on using appropriate instructional methods, and securing the full commitment of the institution. However, respondents from the education group differed from some of the other groups in terms of their perceptions regarding instructional development objectives.

There was no evidence in this study of differences among respondents with regard to methods and organizational arrangements for instructional development.

Recommendations for planning, organizing and implementing instructional development activities are made. Also a number of suggestions are made for further research in the area of instructional improvement.

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CHAPTER 1

INTRODUCTION AND STATEMENT OF THE PROBLEM

Improvement of teaching at the postsecondary level is becoming an issue of paramount importance throughout the world, as indicated by the growth of the relevant literature during the 1970s and 1980s. Not only have several new books been published, but the journals offer many descriptive, analytic, and evaluative articles. An excellent summary of this literature and other sources can be found in *Professional Development: A Guide to Resources* (Gaff, Festa, and Gaff, 1978).

Bergquist and Phillips (1975, 1977), Centra (1976, 1977, 1978), Freedman (1973), Gaff (1975, 1978), and O'Banion (1973, 1976) have pointed out in their writings that the following are some of the major factors affecting academic staff development in colleges and universities:

1. the increasing diversity of student attitudes, abilities, and backgrounds;
2. the decrease in staff mobility due to a declining rate of growth in postsecondary education;
3. the increased complexity of instructional technology;
4. the academic staff's own re-evaluation of their role in the classroom;
5. the rising accountability movement; and,
6. the decrease in financial resources.

Despite the numerous opinions and suggestions that have been put forward by various writers based on experiences and studies at the community, technical, and two-year college level, the writer has been able to identify only a few studies of staff development at the university level. In this respect, Centra's (1976) study can be regarded as an important one for it contains information drawn from a national survey of colleges and universities in the United States about frequency and effectiveness of various practices, the extent to which staff are involved, and organization and funding of programmes.

The situation is no different in Malaysian universities. To the best of this writer's knowledge, no study has previously been undertaken to assess the need for academic staff development in Malaysian universities. Francis Wong (1977) stated that there is no doubt whatever that needs assessment studies in staff development in the Malaysian universities are timely and much needed if our universities are to cope with the increasing diversity of student attitudes, abilities and backgrounds, and modern instructional technology. The present Prime Minister of Malaysia, in his capacity as the Minister of Education, in 1975 stressed the importance of staff development programmes which focus on instructional responsibilities for university academic staff:

> There has emerged of late a growing concern about the effectiveness of academic staff in carrying out their teaching responsibilities. In fact, no other profession permits its members to engage in their responsibilities without some form of formal preparation and guidance. The one important criterion for selection as a university teacher is academic qualifications. It is almost as if teaching at the university level requires no skills. It is therefore urged that certain consideration be given to this issue to ensure that in the long run, university teachers can effectively contribute to optimal student development (N.S.T. 7 Nov. 1975:8).

In another statement, the Deputy Vice-Chancellor of the University of Malaya called upon local universities "to organize for their teaching staff a series of seminars on the various sciences related to the art of teaching" (N.S.T. 14 Dec. 1976:10).

In response to these exhortations, the universities of Malaysia have done nothing notable, besides holding a seminar at the national level on audiovisual aids in higher education in 1975, to either determine the specific needs for instructional development by university constituents or to provide developmental services.

Statement of the Problem

The purpose of this study was to contribute to the data base relevant to planning and organizing instructional development programmes/activities by obtaining perceptions of academic staff at the University of Malaya. The problem was divided into four sub-problems:

1. determination of perceptions of needs relative to specified objectives of instructional development;
2. determination of perceptions of methods of instructional development;
3. determination of perceptions of organizational arrangements for instructional development; and,
4. determination of perceptions of issues and obstacles in instructional development.

The study attempted to discern differences in perceptions when respondents were grouped by Faculty and Centre with which they are associated. Also examined were differences in perceptions when respondents were grouped by various other sub-group characteristics. Of special interest were differences between administrators and non-administrators.

Research Questions

Specifically, the study attempted to find answers to the following research questions related to the four sub-problems:

Sub-problem 1 (Objectives)

1. What are the perceived needs of academic staff relative to specified objectives of instructional development, including the four general areas of objectives: instructional methodology, content expertise, student

needs and university context?

2. What are the differences in perceived needs among academic staff in the eight faculties and two centres relative to specified objectives?
3. What are the differences in perceived needs among academic staff when grouped according to various sub-group characteristics, relative to specified objectives?

Sub-problem 2 (Methods)

4. What are the perceived suitable methods for the acquisition of the knowledge and skills implied in the specified objectives of instructional development?
5. What are the differences among academic staff in the eight faculties and two centres regarding perceived suitable methods?
6. What are the differences among academic staff when grouped according to various sub-group characteristics, regarding perceived suitable methods?

Sub-problem 3 (Organizational Arrangements)

7. What are the perceived organizational arrangements (actual and preferred) for instructional development?
8. What are the differences among academic staff in the eight faculties and two centres regarding perceived organizational arrangements?
9. What are the differences among academic staff when grouped according to various sub-group characteristics,

regarding perceived organizational arrangements?

Sub-problem 4 (Issues and Obstacles)

10. What are the major perceived issues relating to Staff Development at the University of Malaya?
11. What are the major perceived obstacles to Staff Development?
12. What are some proposed ways and means of overcoming these obstacles?

Definitions of Terms Used

For the purpose of this study the terms used are defined as follows:

Staff development. Staff development refers to the processes designed to lead to improved role performance of a staff member as a teacher, researcher, department member or civil servant. In this study the terms staff development and faculty development are used in an interchangeable manner.

Instructional development. Instructional development focusses on the staff member's role as a teacher. There are four aspects of this role which are relevant to competent performance:

1. knowledge of the discipline;
2. knowledge and skills in instructional methodology;
3. understanding of and sensitivity to student needs; and,
4. understanding and acceptance of contextual factors.

Academic staff. Academic staff refers to all full-time probationary and confirmed (tenured) instructors at the University of Malaya. About 11 per cent of them also hold administrative appointments in addition to teaching responsibilities.

Faculty. In the Malaysian context, the term faculty refers only to an organization that comprises a number of departments in a particular discipline. The term faculty is not used to refer to academic staff as in North America.

Centre for Foundation Studies in Science. Centre for Foundation Studies in Science offers pre-basic degree courses to selected students in preparation for entry to the faculties of engineering, medicine and science.

The Language Centre. The Language Centre's primary function is to assist staff and students to be proficient in Bahasa Malaysia (the national language) and the English language. Also, it offers various language courses to students, staff and public at the certificate and diploma levels.

Conceptual Framework

The purpose of staff development in the context of postsecondary educational institutions is to improve the total performance of academic staff in their varied roles including teachers, researchers, department members and civil servants. However, since concerns have been expressed in Malaysia with regard to the instructional competence of university staff members, this study focussed on instructional development.

Review of the related literature (Centra, 1980; Johnson, 1972; Kronk and Shipka, 1980) revealed that the following types of information are valuable in planning and organizing instructional development at the postsecondary level: i. academic staff members' perceptions of their needs for instructional development; ii. university administrators' perceptions of academic staff development needs; iii. students' perceptions of academic staff development needs.

Figure 1 presents a model describing a comprehensive instructional development process. The model, based on Systems theory, shows the components and types of information pertinent to decisions about instructional development.

This study focussed on the "Needs Assessment" and "Instructional Development Programme Delivery" part of the process model as they pertain to academic staff's work. The perceptions of students regarding academic staff development needs were not considered in this study.

For the adoption of this process model for the overall study, it is critical to identify and assess needs in all three areas, namely, Needs Assessment, Instructional Development Programme Delivery, and Improvement of Programme. Evaluation component of the model would evaluate the three areas and provide feedback. Formative evaluation would affect important decisions about changes made in the programme as it develops and summative evaluation would affect important decisions about the programme's future.

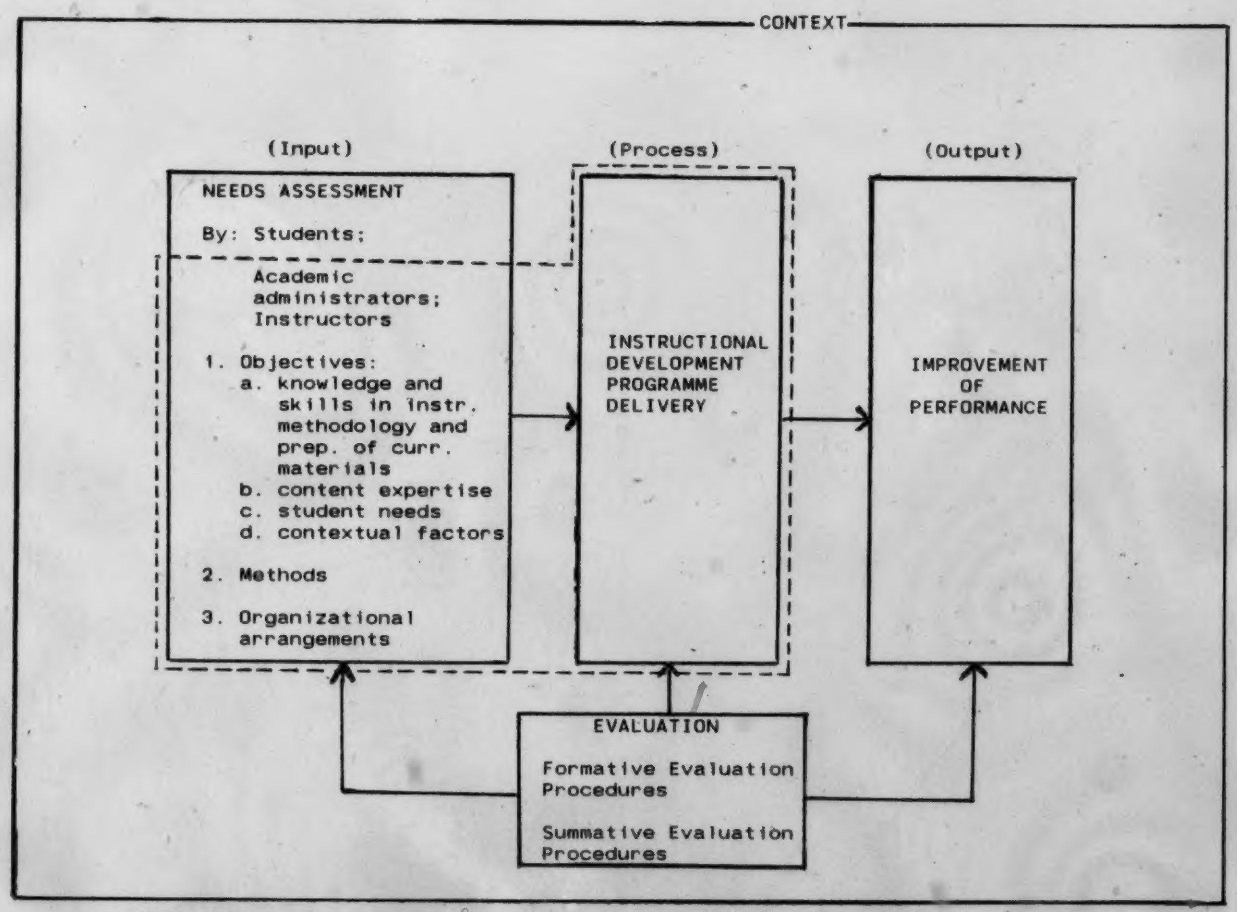
CONTEXT
(Input)
NEEDS ASSESSMENT
By: Students;
Academic administrators; Instructors
1. Objectives:
a. knowledge and skills in instr. methodology and prep. of curr. materials
b. content expertise
c. student needs
d. contextual factors
2. Methods
3. Organizational arrangements
(Process)
INSTRUCTIONAL DEVELOPMENT PROGRAMME DELIVERY
(Output)
IMPROVEMENT OF PERFORMANCE
EVALUATION
Formative Evaluation Procedures
Summative Evaluation Procedures

Figure 1.

A Process Model for Instructional Development
---- Indicates the focus of the study

The area of instructional development can be seen as focussing on aspects of a staff member's role as a teacher although other roles, especially researcher, have a significant impact upon teaching. Specifically, these aspects are: (a) content expertise, (b) instructional methodology including the preparation of curriculum materials, (c) student needs, and (d) contextual factors comprising institutional, political, and socio-economic and demographic dimensions.

Dubin and Taveggia (1968) in their analysis of 56 studies on college and university teaching, have concluded that a staff member's knowledge of content, and understanding of students are the two primary factors for effective teaching, and have also pointed out that knowledge and skills in methodology are crucial in bringing the two factors together. In this study, the researcher has added a fourth dimension -- context awareness -- to the three widely recognized dimensions for a comprehensive study of the need for instructional development at the university level, especially in universities in Malaysia. In recent years it has been the policy of the government of Malaysia to admit proportionately greater numbers of students from rural areas. These students due to the general low economic status of their families are officially considered as disadvantaged. Thus, the context awareness dimension has been added to this study with the aim of developing within staff members increased levels of sensitivity to the particular problems of the rural students.

Each of the four aspects requires specific knowledge and skills and, in order to analyze comprehensively the functions of staff members as teachers, all these areas should be considered (see figure 2).

If an individual is to instruct at the postsecondary level, whether as an undergraduate or graduate teacher, it is essential that he possess a high level of knowledge of his discipline in its theoretical and practical aspects. Such knowledge is enhanced by ongoing research and scholarship.

It is sometimes assumed that knowledge of the discipline is sufficient for instructing at the postsecondary level. However, in order for an instructor to be able to communicate knowledge to students effectively, some understanding of pedagogy is crucial.

With regard to the third aspect of a staff member's role as a teacher, the knowledge and understanding of students' needs and aspirations would enable a staff member to transfer knodwledge effectively. Specifically, staff members should strive for good relations with students, an understanding of extracurriculum barriers to students' progress, such as bureaucratic rules, and a sense of students' aspirations for the future.

Finally, an awareness of contextual factors -- institutional, political and socio-economic/demographic -- would enable a staff member to be more pragmatic, relevant and situation-oriented in his or her teaching.

This study focussed on these four aspects of the teaching function of staff members. But since research is integrally related to teaching (Jencks and Riesman, 1968) some questions relevant to research development needs were included. In this study, the nature and extent of the perceived need for these aspects were obtained by asking respondents to rate their emphasis on specified objectives, methods and organizational arrangements relative to instructional development.

The conceptual framework for this study is a combination of process and content as indicated in Figures 1 and 2. The theoretical underpinnings are presented more fully in Chapter 2, the review of related literature.

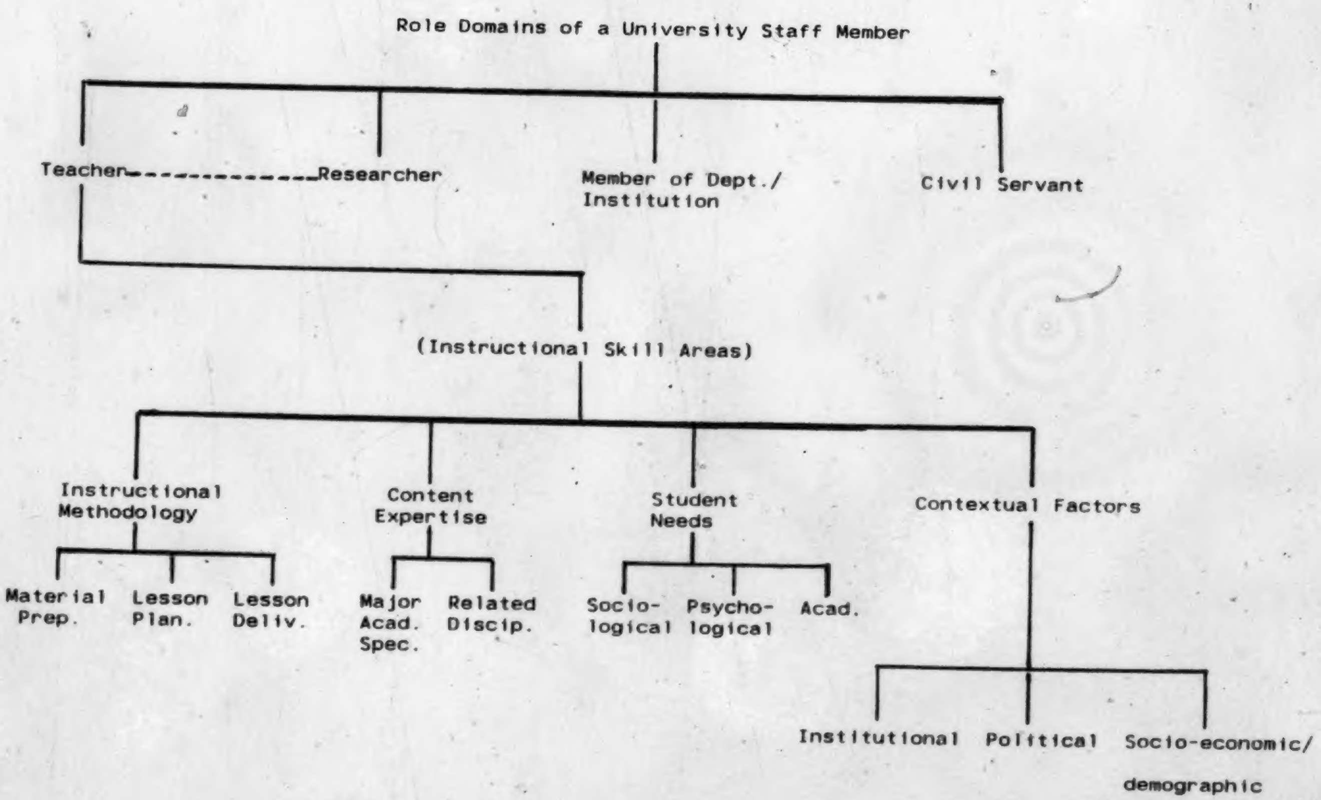
Role Domains of a University Staff Member
Teacher
Researcher
Member of Dept./ Institution
Civil Servant
(Instructional Skill Areas)
Instructional Methodology
Content Expertise
Student Needs
Contextual Factors
Material Prep.
Lesson Plan.
Lesson Deliv.
Major Acad. Spec.
Related Discip.
Socio-logical
Psycho-logical
Acad.
Institutional
Political
Socio-economic/ demographic

Figure 2.

A Content Model for Instructional Development

Significance of the Study

That there is a need for studies of staff development at the university level is evident from the writings of Hammons and Wallace (1976), McKay (1977), O'Banion (1972), and Samlin (1967) who regard needs assessment as an integral and crucial part of every staff development programme. As for staff development needs in universities in Malaysia, no such study has been reported.

The University of Malaya,being the oldest and most prestigious of the five universities, has become a model for the other universities and postsecondary institutions in Malaysia. In short, it is the trend-setter. Findings of this study can, therefore, be expected to have considerable impact on staff development throughout the system.

This study provides an awareness of the nature and extent of the need for instructional development, and also contributes substantially to the base of information relevant to planning and organizing instructional development programmes. In addition, through administrator/faculty comparisons in the eight faculties and two centres, the specific needs of each faculty and centre are identified. These needs, then, may be reflected in the planning of targeted staff development programmes. The findings and recommendations made in this study could generate further research in the area of staff development in universities in Malaysia.

Delimitations

This study was confined to 686 full-time academic staff who hold no administrative designation and another 82 academic staff who also hold administrative positions, in all the eight faculties and two centres (namely the Centre for Foundation Studies in Science and Language Centre) at the University of Malaya in the academic year 1982/1983. The focus of this study was on the perceived needs of the academic staff in terms of objectives, methods and organizational arrangements for instructional development. For this study, instructional development comprised the dimensions of content expertise, knowledge and skills in instructional methodology including preparation of curriculum materials, student needs and the context of teaching.

Limitations

Judgments concerning the need for instructional development at the University of Malaya were made solely on the basis of the perceptions of academic staff.

This study did not include a consideration of the following factors which may also be considered relevant for the data base related to planning and organizing instructional development programmes:

1. university's capabilities, financial and otherwise; and,
2. students' perceptions of teaching performance of academic staff.

As the findings are specific to the University of Malaya, care should be taken if applying the results to other universities.

Organization of the Thesis

The thesis has been assembled in seven chapters.

In the first chapter, the main research problem and sub-problems are presented, terms are defined and a conceptual framework for the study is presented.

Chapter 2 reviews the related literature under five headings: nature of faculty development; assessing instructional development needs; approaches to instructional development; evaluation of instructional development; and faculty perceptions of instructional development.

Chapter 3 describes the methodology, including a description of the population, the sample and the development of the instruments. Data collection, validation and analysis procedures are also discussed.

Chapter 4 briefly describes the contextual factors affecting staff development at the University of Malaya. This chapter was based on the review of the related literature and information collected from interviews with administrators and non-administrators.

Chapter 5 presents and analyzes the research findings.

Chapter 6 discusses the study's findings.

Chapter 7 presents a summary of the study, conclusions and recommendations.

Copies of the instruments as well as relevant correspondence and detailed tables of data are included in the Appendixes.

CHAPTER 2

REVIEW OF THE LITERATURE

This review addresses the literature on faculty development in institutions of higher education, particularly universities and four-year colleges in the United States. The concepts of faculty development and instructional development are discussed, as well as needs assessment and approaches to instructional development.

The Nature of Faculty Development

The literature on faculty development has accumulated at an accelerating rate since the early 1970s. As Bergquist and Phillips (1975b) noted, faculty development has become an increasingly prominent concept for an ever-increasing number of administrators and faculty in American colleges and universities. It is defined after Bergquist and Phillips (1975a) as those processes designed to lead to improved role performance in the personal, professional and instructional domains.

Components of Faculty Development

Prior to the 1970s, faculty development as practiced on most campuses involved matters of orientation of new faculty, sabbaticals, visiting professorships, and sometimes reductions in teaching loads (Stordahl, 1981). After the student strikes of the 1960s, various measures were proposed for improving the teaching capabilities of college faculty, including the creation of a special college teaching degree, the Doctorate of Arts (Brubacher and Rudy, 1976:215).

By 1974, with publication of the report, *Faculty Development in a Time of Retrenchment* (The Group for Human Development in Higher Education, 1974), faculty development had become established as a formal field, and faculty development in the first half of the decade was described as an "intense activity" (Webb and Smith, 1976-7:86).

In what has been called the "current plethora" of faculty development programmes (Gaff, Festa, and Gaff, 1978:69), one estimate indicates that over half the colleges and universities in the United States are actively involved (Centra, 1976). Another estimate asserts that 15 to 25 per cent of institutions have faculty development programmes, centers, offices, or committees, and another 30 to 50 per cent offer faculty development activities (Erickson and Erickson, 1979:670). Emphasis has shifted from solitary individuals to entire institutions, from forced compliance to voluntary commitment (Gaff, Festa, and Gaff, 1978:69).

As faculty development has grown and diversified, one fact has crystallized: that faculty development has a set of dimensions or components. Toombs (1975:714) has called these the professional, the curriculum, and the institutional dimensions. "The relative weight given to each will vary from college to college, from person to person, and from topic to topic, but some element of each lies in every phase of professional development." Likewise Gaff (1976:63) saw three main elements: one dealing with the faculty members themselves, one with the courses they teach, and one with "the *environment* within which teaching and learning occur." While these three dimensions are inter-related, virtual consensus exists on their existence and distinctiveness.

Models of Faculty Development

In the early stages of faculty development, Martin (1975:187) noted a lack of adequate theory, and commented on the need for "alternative formulations from which to choose and on which to base actual programs." Certainly instructors had their own models or "prototypes" of effective instruction (Axelrod, 1973:14). Also, a knowledge base underlay the teaching-learning process (McKeachie, 1967:231); yet the "very complexity" of that process was seen as reducing teaching to an art. The climate of opinion on many campuses was to reject the traditional notion that faculty could develop themselves entirely (Phillips, 1976).

A profusion of models of faculty development has appeared since the early 1970s; these exhibit a great variety of emphases. Some models specify the conditions prerequisite to the conduct of a faculty development programme. Others describe activities, social-psychological foundations or operating principles. Finally, there are "package" models that stress a particular strategy or approach. Clearly, the models cannot be perfectly distinguished.

A variety of conditions have been specified as important to success in faculty development. Wergin, Mason, and Munson (1976:299) concluded that depth of knowledge about the faculty was most predictive; interventions without knowledge of participant needs and expectations were doomed. Diamond (1980:51), saw the faculty developer as a facilitator who should have:

> an understanding of the politics of change; a knowledge of systems design; an understanding of the use and production of instructional mediation; an awareness of what evaluation can and cannot do; and, at times, the ability to serve as evaluator; a knowledge of what represents effective software; and, finally, the developer must possess an ego that allows others to accept the credit for whatever success is accomplished.

Mullally and Duffy (1978) listed as necessary conditions motivation, personnel, finances, and acceptance by faculty.

Lutz (1976) presented a systems scheme of what happens in the process of faculty development, specifying these stages: (1) planning, (2) needs assessment, (3) goal determination, (4) materials review, (5) program design, (6) scheduling activities, (7) selecting participants, (8) preparing cost estimates, (9) instruction and follow-up, (10) evaluation, and (11) revision. The main stages are planning, evaluation, instruction and follow-up, and revision, represented in a closed loop that interacts with such elements as students, community, professional educators, and a theory base.

Davis (1979) projected a schema in which individual and organizational variables interact; the former include energizers of behavior, expectations, and change-related skills; the latter, motivators, role expectations, and resources. Richardson (1975) saw individual development as preceding organizational development. Bergquist and Phillips (1975a, 1975b) and Kramer (1979) saw development in stages within each of the three components: structure (organizational), process (instructional), and attitude (personal). Wergin and associates (1976:300) regarded faculty development as an evolutionary process, with increasing credibility and trust involved in changing relationships from professional to personal and an increasing knowledge base involved in changing rules from expert to collaborative.

In response to Martin's (1975) call for a conceptualization of faculty development in terms of human development, the literature has begun to view the develoment needs of faculty in terms of the life cycle (Gaff, Festa, and Gaff, 1978:67-8). Hodgkinson (1974), for example, viewed adults as unfinished products, with changing roles and crises at different stages of their careers. Toombs (1975) created a matrix involving two dimensions: (1) career stages -- ranging from preservice through new inexperienced, new experienced, established and experienced, and nonteaching; (2) the components of development -- professional, curriculum and institutional.

Unruh and Turner (1970:95) developed a matrix with three dimensions: (1) periods of professional growth; (2) areas of knowledge; and (3) motivation-including incentives, aspirations, expectations, and satisfactions. Likewise McKeachie (1979:15) concentrated on motivation. For him, behavior change lay in bringing "satisfaction and in creating situations in which those satisfactions can be found more readily."

Another psychosocial model is conceived in terms of the level of human awareness. Francis (1975) conceived of faculty development as proceeding through three stages of awareness: (1) consciousness-raising, (2) focal-awareness, and (3) subsidiary awareness. In the first, one's current attitudes are challenged; in the second the individual is more receptive to substitution of new attitudes; in the third both old and new attitudes become more firmly rooted.

Some models are merely a listing of principles that are either assumed or learned from "hard experience." Thus from the list of 16 "don'ts" of Hammons and Wallace (1976), Stordahl (1981) adapted a list of positive postulates. These include: provide a rationale for need; assign responsibility; involve faculty; provide felxibility;

balance institutional and individual needs; make participation voluntary; have administrative support and participation; reward participation; provide continuity; mix internal and external resources; evaluate the results, and provide adequate funding.

Gaff (1975) abstracted a set of 17 principles from faculty development documents. Gaff (1976) later offered a shorter list that gives the essence of his position: faculty are the most valuable resource; teaching is primary; faculty can profit from faculty development; each institution should have a programme; faculty development is not just a fad.

Harris (1980) listed 13 assumptions for any inservice education programme regardless of educational level. Smith and Ovard (1979) used a short list of principles that stressed such things as freedom of the faculty member to create his own programme.

Finally, some models present specific packages with attendant strategies and techniques. Ferren and White (1977) contrasted the troubleshooting and long-term supervision models as total ways of approaching particular types of situations. The first employs narrow objectives and a limited time framework, with the consultant taking the responsibility; the latter, more open-ended, requires extensive time investment, with the instructor in a problem-solving role.

Webb and Smith (1976-7) listed several models, describing the strengths and weaknesses of each. The scholarship model is the traditional model of faculty improvement; sabbatical leaves are the typical technique, but no evidence attests to its efficacy. The organizational and personal growth model seeks change at two levels, that is by adjusting the incentive and reward system; the model is seen as having much potential. The instructional effectiveness model is based on a problem-solving approach; while its strength is replicability, it is costly. The changing faculty role model puts the faculty member on a team led by an educational technology expert; it has apparently been well received by staff and administration.

The Need for Faculty Development

Institutions of higher education have responded increasingly to the need for faculty development. As Moats (1975) has shown, in a survey of faculty development directors at ten universities, administrators showed increasing concern for the quality of instruction and a corresponding increase in participation in faculty development programmes by faculty and graduate students. A need for faculty development can be viewed from two perspectives: (1) a larger perspective, in terms of conditions generating the need; (2) a more immediate perspective, in terms of how faculty development is seen as meeting that need.

It should be stressed that the review of models of faculty development clearly indicates that despite their large number, diversity and complexity of models no comprehensive model has been generally endorsed.

A number of authors have developed lists of conditions giving impetus to the faculty development movement. While some are amenable to change, others are more or less intractable and need to be recognized in planning faculty development programmes.

Lack of happiness. As Barzun (1968:226) said: "There might be no objections worth heeding if everybody up and down the system were cheerful and lively about his place in it and the results of its operation. But the opposite is true." Centra (1978a) noted a general disenchantment among students, parents, and legislators. However, Hodgkinson (1970) indicated that the mesh between type of student and type of institution can also affect satisfaction. Kieffer (1971) spoke of poor faculty morale, while Stordahl (1981) noted the faculty's sense of isolation amid an atmosphere of competition and rapid change.

Lack of incentives. Kieffer (1971) pointed out that typical faculty promotion and tenure systems do not reward good teaching. McKeachie (1979) asserted that intrinsic rewards have to be strengthened before incentives can be effective.

Attempts to be innovative. The group for Human Development in Higher Education (1974) took note of the attempts to experiment, to reform the system, or to go outside it. While this has caused concern, it is also contrary to the rhythm of higher education, which is conservative (Kieffer, 1977).

Accountability. Several authors have noted the demand among students, community, and legislators for accountability (Group for Human Development in Higher Education, 1974; Bergquist and Phillips, 1975a; Gaff, Festa, and Gaff, 1978; Miller, 1974; Stordahl, 1981). This has resulted in a greater demand for efficiency in an economic sense (Miller, 1974:3) as well as effectiveness in an educational sense.

Declining faculty mobility. This has been noted by various authors (Group for Human Development in Higher education, 1974; Bergquist and Phillips, 1975a; Gaff, Festa, and Gaff, 1978; Stordahl, 1981; Webb and Smith, 1976-7). As Webb and Smith (1976-7:86) pointed out, it is no longer possible to play the "institutional musical chairs" that was possible in the 1960s. Stordahl (1981) notes that the decline in "new blood" means a decline in vitality.

Declining finances. Several authorities listed declining finances (Bergquist and Phillips, 1975a; Gaff, Festa, and Gaff, 1978; Kieffer, 1971; Miller, 1974; Stordahl, 1981). Cheit (1971:138) asserted that, contrary to expectations, the growth of the 1960s did not increase protection for institutions, "but may well have made them more vulnerable to a downturn."

Declining enrollments. Declining enrollments were noted by Bergquist and Phillips (1975a) and by Gaff, Festa, and Gaff (1978:67). The problem has underscored "the stark reality of finite resources, both human and financial...."

Heterogeneity of students. Webb and Smith (1976-7) cited heterogeneity as one of two major factors giving impetus to faculty development. Stordahl (1981) indicated that this has generated pressure on faculties to be more flexible and yet more productive.

Lack of awareness of sophisticated technology. Stordahl (1981) noted that faculty are not able to use such tools even when they are aware of their existence.

Other factors. Kieffer (1971) listed several additional factors: lack of faculty time; lack of experimentation by leading professionals and institutions to serve as models; lack of interdisciplinary constituencies, and lack of knowledge about the process of learning.

The Significance of Instructional Development

The literature on faculty development has shown instructional development to be the oldest and best known component of faculty development. Instructional development has been associated with a number of innovations (University of Michigan, 1977), new teaching techniques, such as team teaching (Lorimer and Dressel, 1969), individualized instruction (University of California, 1968), behaviorally based teaching (Johnson and Ruskin, 1978), attention to the affective domain (Runkel, 1969), learning contracts, competency based instruction, case studies, and field experience (Milton, et al., 1978), new technologies, such as computers (Milton, et al., 1978); and new ancillary tools, such as behavioral objectives.

Gaff (1979:237) saw the focus of instructional development in "the conditions of learning, particularly as provided by courses." The foundations of such a focus lie "in fields of curriculum and instruction, learning theory, educational media and technology, and systems theory." Instructional development continues to grow in importance not only because of the development and spread of innovations, but because this component relates closely to the other two components of faculty development (Toombs, 1975).

Some authorities maintain that no need exists for a formal development programme of any sort, that faculty are capable of developing themselves in all spheres (e.g., Furniss, 1975). However, it has also been asserted that instruction should fit the needs of students (Chickering, 1969), something that it is accused of failing to do (Mayhew, 1969). Morstain and Gaff (1977:302) surveyed the instructional preferences of students, finding:

> The highest-ranked preferences were for teachers (1) to stimulate interests of students in the subject matter; (2) to convey more enthusiasm for their courses; (3) to encourage more vigorous discussions in class; and (4) to relate the subject matter more to the interests and concerns of students.

Clearly, then there is a need for instructional development in universities. Prerequisite to the launching of any development programme is a careful needs assessment.

Assessing Instructional Development Needs

Needs assessment constitutes a form of evaluation. On the one hand, it overlaps with the kind of faculty evaluation that has traditionally been used for years as a basis for promotion and tenure decisions. On the other hand, it constitutes the baseline evaluation of a given faculty development programme, with which later evaluation of programme outcomes can be compared. Lewis (1975) noted the lack of evaluative information of this sort. More fundamentally, the area of needs assessment has been characterized as being not very sophisticated (Dillon, 1976:169). One reason may be confusion over the concept of need: need is often confused with want (Scriven and Roth, 1978). Another is the potential for political considerations to pervert any sort of evaluative results (Muse, 1979; Sjoberg, 1975; Sweeney and Grasha, 1979). Still another is the lack of universal standards (Wilson, 1979:141).

Contents of Needs Assessment

The question of what is assessed is related to the purpose of assessment, who is assessed, and who does the assessment. Regarding purpose, Stake and Gooler (1971) saw the setting of educational priorities as based on a human purpose, a knowledge purpose and a career purpose. Kozma and associates (1978) saw assessment as basic to decision-making. Accountability and the allocation of rewards have been seen as purposes of assessment also (Perlberg, 1979; Sagen, 1976).

Among the purposes of faculty evaluation, Genova and associates (1976:8) included: helping faculty improve their performance; keeping an inventory of personnel resources for reassignment and retraining; evaluating curriculum, sequences, programmes, departments, and units; and conducting research on factors related to faculty performance. The need to assess effectiveness has been linked with advances in educational technology (Harrison and Stolurow, 1975).

The question of who is assessed was addressed by Bernard (1964), who was concerned with the assessment of academic women. A single individual being evaluated may be evaluated differently at different career stages.

Certain basic general questions have been asked about the qualities of the instructors. Ericksen (1970:2-3) lists these: (1) Does the teacher care? (2) Is the teacher fair?

(3) Does the teacher know the subject matter?

Regarding the assessor, Selin (1981) found a relationship between discipline orientation and the kind of evaluation. Harris (1980:220) combined the assessor and assessee perspectives in viewing personal and institutional needs, on the one hand, and self-perceived and other-perceived needs, on the other hand.

In general, the content of needs assessment tends to arise from purpose--frequently an a priori purpose of determining the nature of a staff development programme which is to follow. For example, Lorio (1980:69-72) asked specific questions regarding the needs of the faculty development programme itself: (1) What kinds of problems may surface? (2) What new skills may be needed for the delivery of inservice training? (3) What problems may stem from the need to assess strengths of the faculty in terms of new and needed skills? (4) What are some key considerations that must be included in a plan for faculty development? (5) How does one move faculty through various stages of awareness, readiness, and commitment? (6)Does one distinguish between planning to plan and action planning? (7) What are some of the causes of failure in planning? (8) Is poor process management involved?

Methods of Assessment

Needs assessment for instructional development is most readily conceptualized as measures of instructional quality. Various approaches have been identified.

Kronk and Shipka (1980:9-11) listed: self-evaluation, student rating, administrator observation and visitation, colleague review, and student learning. They noted the strengths and weaknesses of each method. Self-evaluation helps in self-improvement, but is questionable in objectivity and entails the risk of self-incrimination. Student ratings are the most widely used method, but are distrusted by faculty. Classroom visits cannot assess ongoing performance in a valid and reliable way. Peer review is useful in assessing professional competence, but is subject to vagaries of politics and personality. Student learning may be the most valid indicator, but is not popular among faculty because it is subject to variables beyond the instructor's control (e.g. native ability, family influence, course load, study habits).

Centra (1980:13) found that university faculty ranked the effectiveness of assessment methods in the following order from most to least: faculty with expertise consulting with other faculty on teaching or course improvement; analysis of in-class videotapes; self-assessment; "master teachers" or senior faculty working with new teachers; growth contract; administrative evaluator; classroom visit by faculty development specialist; student ratings, and informal assessment by colleagues. These rankings are consistent with the comments of Kronk and Shipka (1980).

Approaches to Instructional Development

Instructional development has traditionally been fostered in books and other writings on the role and responsibilities of the college instructor. These have been written both in a general vein and for specific subject matters such as history (Bostert, 1978), mathematics (Gurland, 1978), English (Partridge, 1978), social science (Cooley, 1978), and music (Griffel, 1978). Davis (1976:133) is critical of this genre of literature:

> Ironically, most of the books about college teaching are not about college teaching at all... they tell what it is like to be a college teacher, how to evaluate college teaching, and what research on teaching has been done. But only rarely, if at all, is there any discussion of *the actual teaching-learning process itself*.

Another approach has been to suggest activities that are conducive to self-improvement. Brown and Hanger (1975) compiled a list of 95 activities that were categorized under the following rubrics: take on a new job temporarily; accept a visiting professorship; seek new patterns of interaction; read; write; experiment while teaching; develop advising skills; seek feedback; serve on committees; and ultilize summers. Walker and Vaughn (1970:194) list possible avenues for self-improvement: keeping up to date in one's field; becoming involved in research in one's field; becoming involved in campus student activities; planning teaching procedures for each semester; experimenting with teaching techniques and instructional materials different from the ones usually followed; and developing adequate means of assessing the effectiveness of one's teaching. Not surprisingly, these two lists overlap. They are not tailored to needs of individual instructors in particular settings.

Other recommendations have been made. Mayhew (1969) saw cluster colleges as a means of maximizing instructional effectiveness. Buhl and Greenfield (1975) and Heie and associates (1979) regarded contracting as a means by which the instructor could improve himself in a guided way. The Carnegie Commission (1972) saw training for the new technology as essential. Grant and Riesman (1978) advocated using the best retired professors, upgrading mid-career faculty, and using peer learning situations. Connell and associates (1976-7) favored development of an inquiry mind-set that would motivate and guide the instructor's development of his own approach to teaching.

Various programmes have been described. Birnbaum (1975) sketched a modified academic calendar at the University of Wisconsin at Oshkosh, which sets aside a certain proportion of each year for instructional and other development. Jabker and Halinski (1978) described the use of academic rewards as an important accompaniment of instructional development at Illinois State University. Blake and Saufly (1976) studied development in a new college setting on a University of California campus. Smoot (1978) described instructional development at Andrews University, McKnight (1981) at Furman University, Grow and associates (1976) at various southern universities, Davies and associates (1976) at Michigan State, and Linden (1976-7) at the State University of New York at Stony Brook. Stice (1976-7) wrote about the curriculum development center at the University of Texas.

Centra (1978b:155,160) factor analyzed faculty development programmes in all parts of the United States, coming up with four factors: high faculty involvement; instructional assistance practices; traditional practices; and emphasis on assessment. In the second category were included: specialists consulting in developing course objectives and designs; consultants in developing teaching skills or strategies; consultants in helping to construct assessments of students; assistance in the use of computers and instructional technology; assistance in the use of audiovisual and other media; workshops or presentations on various methods and techniques. He found that 65 per cent of the universities had a person or center for instructional development.

Evaluation of Instructional Development

Evaluation of faculty development programmes is even less developed than is needs assessment. As Mullally and Duffy (1978:122) stated:

> The impact of faculty development is not easy to assess; in terms of concrete changes in teaching behaviors through personal visitations and consultations with the key person, only a small percentage of the faculty will be touched. Indeed, it may appear as if many faculty are actively ignoring the existence of the program. Workshops may be devoted primarily to "saving the saved," but identifiable improvement will take place.

A few evaluation studies have been conducted. Pace (1973), reviewing different approaches to evaluation, cites the advantages and disadvantages of each. Mayo (1979) compared those receiving faculty development assistance with controls, while Hoyt and Howard (1978) compared those involved with a faculty development programme in varying degrees: intensive involvement was associated with more improvement.

Centra (1977) surveyed the results of faculty development around the United States. He found that annual awards for teaching excellence, while commonly used, were not effective. He found that half of the institutions using student ratings found them effective in improving instruction. In-class videotapes were found to belong among the more effective techniques of development. Workshops and seminars on specific techniques were more effective than those dealing with general issues. Special development grants to instructors were deemed highly effective. Rated high were designs to improve techniques in testing and evaluation. In another study, Centra (1972) found that student feedback was not effective in improving instructional performance as measured by student ratings.

Faculty Perceptions of Instructional Development

The importance of faculty perceptions about faculty development has been noted in the literature, particularly by those who are opposed to it. Freedman and Sanford (1973) saw faculty members as feeling threatened by new ways of defining themselves, by the demands made on time and energy, by the fear of failure, and ambiguity in the criteria of success. To be tapped for a development program seems to some faculty like being a freshman invited into "dumbbell English" (Martin, 1975:189).

On the other hand, those favoring faculty development have been characterized by Mullally and Duffy (1978:122) as follows:

> (a) upper level administrators who expect faculty development to ..relieve budgetary pressures by allowing them to do "more with less" in the classroom ...; (b) departmental chairmen who expect faculty development to retrain out-of-date faculty...; (c) those faculty enthused about computer assisted instruction or other innovations and expect the faculty development program to provide the hardware; (d) people from audio-visual services..; (e) faculty senate members who perceive faculty development as a subcommittee of theirs to be fitted into that complex and frequently divided group; (f) researchers who, as faculty, want to be developed by having their research funded; and (g) students who wish to publicly embarrass those faculty whom they perceive

as poor teachers through a public evaluation instrument. Jalbert (1980:57) saw some as recogizing the need for new roles and others as recognizing the need for change but not in terms of new roles.

Little actual research exists on faculty perceptions of the need for insructional development. Yet Rosenfeldt (1981) found in a general way that such perceptions were an important factor in faculty participation in faculty development. Wilson and associates (1975:52) concluded from a national survey:

> Factors such as the power and status of faculty members who oppose change, the cumbersome nature of academic governance, the disagreements over means, the ignorance of faculty members about change options, the economics of support for program planners, and time for faculty members to devote to putting sentiment into action are serious obstacles to educational reform.

Summary

The literature of faculty development, and in particular on instructional development, was found to be extensive in some areas and limited in others. Instructional development appears as one of the three principal components of faculty development -- the other two being professional or personal development and organizational or institutional development. Instructional development is related to the other two components, but has central significance for the entire field of faculty development. Over the past decade or more, a number of innovations in educational technology and strategies have surfaced. This has resulted in a growing need to develop existing faculty in the instructional area -- in addition to the need that has always existed for instructional development.

The growing need for instructional development has come about as a result of a number of factors. Notable are the need to achieve greater cost-effectiveness, dissatisfaction with higher education in the public sector, and dissatisfaction within the university among students who find fault with the educational product. This need has been perceived as a growing trend by a number of different writers in a more or less intuitive way. It has been more difficult to conduct a needs assessment of instructional development in a formal sense, primarily because the concepts and techniques of needs assessment are not as well developed as they might be.

One kind of needs assessment is the survey of faculty perceptions. Student ratings of faculty performance have emerged as the most common form of faculty evaluation while faculty perceptions themselves have been studied very little. Only in the most general way have they been assessed: namely, with regard to their opposition to or acceptance of the need for instructional development. Inquiry has not gone far beyond this single issue, and therefore has not adequately addressed the issue of the appropriate means of development to be used, including the organizational arrangements for carrying out an instructional development programme.

Considering the "plethora of techniques" for faculty development -- and instructional techniques in particular -- it is undoubtedly timely that faculty perceptions of those techniques and organizational arrangements are undergoing deeper examination.

CHAPTER 3

CONTEXTUAL FACTORS AFFECTING STAFF DEVELOPMENT AT THE UNIVERSITY OF MALAYA

Higher education in Malaysia has grown rapidly in the 'seventies both in the number of institutions and in student numbers. This rapid expansion has been brought about by the need to increase the supply of high level manpower for economic and social development and has been supported by rising enrolment at the secondary level.

The policy in higher education today is guided primarily by the following objectives as defined in the Third (1976-1980) and Fourth (1981-1985) Malaysia Development Plans:

1. The strengthening of the educational system for promoting national integration and unity through:
    a. the continued implementation, in stages, of Bahasa Malaysia as the medium of instruction at all levels.
    b. the development of personality, character, and good citizenship and the promotion of moral discipline through curriculum and extra-curriculum activities.
    c. the narrowing of the gap in educational opportunities between the rich and the poor, and among the various regions and races in the country, through a more equitable distribution of resources and facilities.

2. The orientation and expansion of the education and training system towards meeting national manpower needs, especially in science and technology.
3. The improvement of the quality of education in order to reduce wastage and increase its effectiveness for nation building.

To be in line with the national policy of change over in the medium of instruction from English to Bahasa Malaysia in stages, at all levels in the national education system, all universities in Malaysia are currently undertaking serious efforts to provide opportunities and incentives for their academic staff to be proficient to instruct in the national language.

Recruitment of Academic Staff

The minimum academic qualifications necessary for appointment as an academic staff member is a Master's degree. Recruitment is done in two ways. Firstly, through open advertisements both locally and abroad, applications are invited to fill a variety of academic posts. Secondly, in the light of the national policy of correcting ethnic imbalances in the job situation, the universities have instituted an indigenous academic staff training programme (Skim Latihan Akademik Bumiputra). The purpose of the programme is to select and send qualified indigenous candidates for graduate training overseas. On completion of their studies they are absorbed into the academic staff.

Terms and Conditions of Service

Terms and conditions of service for all academic staff in the five Malaysian universities are determined by the Public Services Commission, and they apply with very minor variations to both Malaysian as well as foreign staff. Foreign staff are all appointed on contract normally for three years, and their appointments do not, unless circumstances demand, exceed six years. Malaysian staff when appointed are placed on probation for three years. During the probationary period, they are required to pass the Government Examination and also obtain at least a pass in Bahasa Malaysia at the Malaysian School Certificate level. The Government Examination, conducted by the Public Services Commission, focusses on the General Orders of the government, ethics, Malaysian history and the structure and working of the Malaysian government.

Upon passing the two above mentioned examinations and satisfactory service, lecturers on probation are confirmed in service and given tenure until retirement at the age of 55. Satisfactory service in this instance means that a staff member has carried out his teaching duties in a manner considered effective, that he has shown potential as a researcher, and has contributed to service and administrative functions. In the Malaysian context, one criterion of great importance is the demonstrated use of the Bahasa Malaysia in instruction. The same set of criteria, albeit applied more stringently, including the use of external academic assessors, apply when staff members are to be promoted to the ranks of associate professor and professor.

The salary structure for staff is stipulated in the Cabinet Salaries Commission Report of 1976 which states the salary structure for all government employees.

Academic Staff Development Practices

The University of Malaya has adopted a number of practices as part of its academic staff development programme since its inception. Among the practices are training schemes to obtain higher degrees, sabbatical leaves, travel grants [illegible]o professional conferences, involvement with pro[illegible]onal organizations, research and practice in industries, clinics, and other such institutions.

Staff member are selected for the Academic Staff Training Scheme to obtain higher degrees overseas on the basis of the current and future needs of each department within a faculty. The nature and extent of the need of each department or faculty for additional staff is largely determined by the manpower needs of the nation for the next five-year period. The type and extent of manpower needed (from institutions of higher learning in the country) are stated in the five-year Malaysia Plans. In the process of selection, capability and suitability of candidates are given primary consideration. It has been the practice of the University of Malaya to send its staff members to internationally recognized institutions of higher learning in various parts of the world. However, until the mid-1970s, a large number of trainees went to the United Kingdom as the University of Malaya was largely based on the British university system. In the last ten years, the institutions of higher learning in the United States and Canada have been playing a major role in providing such training to Malaysian university staff members as the programmes offered have been shown to meet the needs of Malaysian scholars and, furthermore, the cost of higher education in these countries is comparatively much lower than in the United Kingdom.

A scrutiny of the University of Malaya's annual budgets for the last five years indicates that the institution has been spending approximately 5 percent(5 million Ringgit in the 1982 budget) of its annual budget for staff development activities. However, a very large portion of the allocation for staff development is being spent on sending its staff members overseas to obtain higher academic qualifications. It should also be noted here that there has been no specific allocation in the staff development budget for providing facilities for improving teaching skills of the staff members.

The university's commitment to research is evident from its annual budgets. It has been spending approximately 6 percent of its annual budget for research under Vote F and allocation for research has been increasing steadily in the last five years.

A Career Development Unit functions under the Deputy Vice-Chancellor for Administration and Establishment. To date, the primary function of this unit has been to select and send staff members to overseas institutions for higher degrees. It is not a full-fledged unit as it does not have a staff of its own and, supervision of it is just one of the numerous responsibilities that the Deputy Vice-Chancellor performs in his job.

Improvement of instruction as a component of academic staff development is a relatively recent phenomenon in Malaysian universities. There is no definite programme on instructional improvement at the Univesity of Malaya. However, as Phillips (1981) pointed out, on an individual basis, a few faculties have recognized the importance of instructional improvement and conducted workshops and conferences to improve staff effectiveness as teachers.

To date only a few national seminars and workshops on teaching in institutions of higher learning were held in Malaysia. Two such events were the "Workshop on University

Teaching Methods in Malaysia" in November, 1973 and the "Seminar on Audiovisual Aids in Higher Education" in September 1975. However, participation in such events is limited to a few academic staff (Phillips, 1981).

In view of what has been said in the aforementioned paragraphs, it is clear that there is a need for academic staff development programmes to improve instruction in Malaysian universities. Besides the Prime Minister and the Deputy Vice-Chancellor of the University of Malaya, another Malaysian professor of education (Chai, 1973:30) also has addressed this problem:

> It would be reasonable to assume that there could be a significant improvement in the overall quality of higher education if there was some system of ensuring that academics be reasonably competent teachers (Chai, 1977, p.30).

Faculty development activities in the University of Malaya have emphasized academic upgrading and no systematic programme of instructional improvement within the institution presently exists.

CHAPTER 4

METHODOLOGY

The major purpose of this study was to determine the nature and extent of the need for instructional development activities as perceived by academic staff at the University of Malaya. A second purpose was to discern differences in the perceptions of need for instructional development held by academic staff who do not hold administrative positions and academic staff who hold administrative positions in addition to reduced teaching load in the eight faculties and two centres. In view of the nature of this study, a descriptive and exploratory approach was considered appropriate.

As remarked by Ary and associates (1979) and Sax (1979), the survey method was considered to be appropriate for a descriptive and exploratory study. Ary and associates note that this type of research is designed to obtain information concerning the currrent status, desired status and methods of achieving the desired status of phenomena. From a 84 to be based on comparisons, contrasts or relationships.

The conceptual model for this study was the basic source of questions. The questionnaire was designed to reflect the four aspects of instructional development, i.e., content expertise, knowledge and skills in instructional methodology and preparation of curriculum materials, student needs, and context of teaching.

Dubin and Taveggia (1968) and Eble (1971) have found content expertise, knowledge and skills in instructional methodology and student needs to be important teaching qualities for a staff member. However, Gaff (1975) and Kozma and associates (1978) have pointed out that many universities give more recognition to content expertise, some recognition to understanding of student needs, but little recognition to instructional methodology. It should also be noted here that it is a common practice thoughout the world for universities to hire holders of earned doctorates, for the content expertise they have acquired, as teachers. As such, it is reasonable to assume that by and large, instructors in universities have attained mastery of subject matter in their disciplines before they are employed.

In view of this, the researcher of this study decided to give an emphasis of 4:2:2:1 respectively to instructional methodology and preparation of curriculum materials, student needs, context of teaching, and content expertise in the questionnaire. From this point the researcher searched for suitable questions from established instruments (Bergquist and Phillips, 1975, 1977; Centra, 1976; and Weleschuk, 1977) to suit the Malaysian context and made up noted deficiencies with original items from the review of literature.

Questionnaire

The main instrument used for collecting the data for the study was a questionnaire(See Appendix A). It was administered to a sample of staff and administrators in the eight faculties and two centres at the University of Malaya. The questionnaire consisted of five sections:

Section I: This section sought personal data including position, name of department and faculty, type of training, teaching specialization, major area of work, and experience of university teaching.

Section II: This section sought answers to questions regarding the respondents' perceptions of preferred emphases placed upon a number of selected objectives of staff development. A Likert-type of rating scale was used and respondents were asked to circle the appropriate number on the response scale.

Section III: This section asked respondents to match summarized objectives with the most suitable instructional methods for attaining the knowledge/or skills implied by the summarized objectives.

Section IV: This section asked respondents to indicate their perceptions by circling the appropriate number on each response scale, of actual practices and preferred practices relating to the manner in which the university-supported staff development programmes are implemented.

Section V: This section sought answers to three open-ended questions related to respondents' previous staff development experiences, felt needs and plans for further development.

Items in Sections II and IV of the questionnaire were rated on a five-point Likert-type scale, and were machine scored. Tuckman (1978) and Wiersma (1980) are of the opinion that a five-point Likert-type scale is appropriate for a descriptive and exploratory study, like this one, for the following reasons:

1. it is easy to score;
2. it permits respondents to choose between alternatives in conjunction with being critical of their estimation of the value of objective/organizational arrangement;
3. it consists of a number of points on the theoretical continuum to which the respondent may respond, and thus indicate his/her intensity of feeling;
4. it averts problems of respondents having to answer questions related only to what is (actual) (Tuckman, 1978) because it also makes allowances based on responses based on "what ought to be" (preferred); and,
5. it facilitates both parametric and non-parametric statistical treatments of the data.

In this study, respondents were asked to use the five-point (Likert) scale in Sections II and IV to indicate their perceptions concerning Objectives of University

Instructional Development and Strategies and Organizational Arrangements for Implementing Instructional Development Programmes.

Interview Schedule

Interviews for the main study were conducted at the University of Malaya in October and November 1982(See Appendix A). The Interview Schedule consisted of questions related to historical development of staff development and issues in staff development at the University of Malaya.

The interviews were aimed at obtaining additional information on the perceived need for instructional development at the University of Malaya. The interviews also represented a step in the direction of establishing a measure of validity for the Questionnaire.

The researcher carried out a total of thirty interviews with the following:

1. ten academic staff who also hold administrative positions in addition to their reduced teaching load; and,
2. twenty academic staff who hold no administrative designation.

The ten administrators and twenty non-administrators were selected randomly from that portion of the population that was not given questionnaires.

Validation

To ensure content validity the Questionnaire and Interview Schedule items were scrutinized by faculty members in the Department of Educational Administration and graduate students in the Department of Educational Administration who have worked at the university level. Based on their suggestions, the two instruments were modified. The modified version of the questionnaire was sent to the University of Science Malaysia, one of the local universities in Malaysia, to ascertain local perception. The validity, clarity and relevance of the questionnaire were tested in a pilot study by asking twenty staff members of the University of Science Malaysia to respond to the questionnaire. The respondents were asked to:

1. respond to the questionnaire and record the time to complete it;
2. criticize any aspect of content, instructions or format which detracted from clarity or relevance; and,
3. suggest items which should be changed, deleted or added.

The Interview Schedule was pilot tested at the University of Alberta in August 1982. Based on the suggestions made by interviewees with regard to expansion of certain questions and deletion of others, the Interview Schedule was modified for data gathering.

Sample and Sampling Technique

The population represented in the study comprised all full-time academic staff members (768) listed in the latest (1981-82) calendar of the University of Malaya. Of the 768, (see Table 1) 82 academic staff members also hold administrative designations in addition to reduced teaching load. A random, stratified sample was drawn from the eight faculties and two centres which were stratified according to:

1. academic staff who hold no administrative designation in the eight faculties and two centres; and,
2. academic staff who also hold administrative appointments in the eight faculties and two centres in addition to reduced teaching load. The sample size was:
    a. 25 percent of academic staff who hold no administrative designation; and,
    b. 50 percent of academic staff who also hold administrative positions in addition to their reduced teaching load.

This was done to assure a sufficient sized group of administrators for purposes of comparing with instructors.

Table 1

Size and Percentage of Population, Sample and Returns

Position	Population No.	Population %	Sample No.	Sample %	Returns No.	Returns %
Administrators	82	10.7	41	19.4	34	20.1
Instructors	686	89.3	170	80.6	135	79.9
Total	**768**	**100.0**	**211**	**100.0**	**169**	**100.0**

Table 1 shows that response rate for administrators and instructors was about the same. Therefore the sample had a bias towards administrators. But, as will be shown, the analysis of these two groups showed Therefore it is assumed that the sample is roughly representative of the university as a whole even though it has a bias in favour of administrators.

Data Collection

Following a letter of request from the researcher, permission was granted by the Vice-Chancellor of the University of Malaya, Royal Professor Ungku Abdul Aziz, to conduct the study at the University of Malaya. The researcher visited the University of Malaya for the purpose of distributing the questionnaires and carrying out the interviews.

A letter stating the purposes and significance of the study was sent with the questionnaire. Although each questionnaire was given an identifying code number to be used for recording returned questionnaires and follow-up purposes, each respondent was assured anonymity. Also included was a self-addressed envelope so that individuals could respond with a minimum of inconvenience. All questionnaires were posted and received by campus mail. Within the time limit outlined for the return of the completed questionnaires, 55 per cent of the sample was returned.

A few days after the time limit that was set in the letter, a first follow-up letter, pointing out again the importance of the study and value of the individual's contribution to this important project, was sent to those who had not responded. This was followed by telephone calls.

Two weeks after the telephone calls, the second and final follow-up letter along with another copy of the questionnaire and another self-addressed envelope was sent to each individual who had not responded.

The first follow-up letter and the telephone calls brought in an additional 20 per cent and the second and final follow-up letter brought in 6 per cent. In all, 81 per cent of the sample was returned (Table 2).

Table 2

Questionnaire Distribution and Returns by Faculty/Centre

Faculty/Centre	**No. Sent**	**No. Usable**	**%**
Arts & Soc.Sc.	36	24	66.7
Dentistry	8	6	75.0
Econ. & Admin.	22	19	86.4
Education	14	14	100.0
Engineering	13	10	77.0
Law	7	6	85.7
Medicine	45	36	80.0
Science	42	33	78.6
Centre for Found. Studies in Sc.	4	3	75.0
Language Centre	20	18	90.0
Total	**211**	**169**	**81.0**

Interview questions were given to the respondents a few days in advance of the interview session.

Treatment of Data

The data from the questionnaires was coded and transferred to computer cards for analysis. It was classified according to the following independent variables:

1. faculty/centre;
2. position of the respondent (administrator or instructor);
3. academic rank (language teacher, lecturer, associate professor, and professor);
4. tenure status (confirmed staff, on probation and on contract);
5. sex (male or female);
6. age (35 yrs. or younger, 36-45 yrs., 46 or older);

7. qualification of the respondent (Bachelor, Master's or Doctoral degree);
8. year the highest degree was earned;
9. country from which the highest academic degree was earned;
10. pedagogical training (yes or no); and,
11. number of years of teaching experience at the University of Malaya.

The FREQUENCIES procedure (Nie, et al., 1975:194-202) was used to determine frequencies and percentage distribution.

The interview schedule addressed two aspects of staff development: historical development and issues and obstacles. Responses to questions on the history of staff development were placed in Chapter 3. Thus, Chapter 3 is based partly on material taken from the literature and partly on information gathered from the interviews. Responses to questions on issues and obstacles relating to instructional development were placed in Chapter 5.

As for the interview data, principles of content analysis were used. "Content analysis is a research technique for the objective,systematic,and quantitative description of the manifest content of communication" (Berelson,1952,p.18). Content analysis comprises various categories. Among them subject matter categories are packages of data arranged according to themes which the data themselves present. The theme is the essential component of a content analysis and the single word or symbol is generally the smallest unit that is used in content analysis.

To arrive at six issues relating to instructional development based on the frequency of the given attribute, the interview data were classified into subject matter catergories and coded under single word or symbol and theme.

Characteristics of Respondents

Faculty/Centre distribution. As is exhibited in Table 3, the distribution of respondents in terms of faculty and centre of teaching approximates that for the total staff: Arts and Social Sciences, 14 percent; Dentistry, 4 percent; Economics and Public Administration, 11 percent; Education, 8 percent; Engineering, 6 percent; Law, 4 percent; Medicine, 21 percent; Science, 20 percent; Centre for Foundation Studies in Science, 2 percent; and, Language Centre, 11 percent. As the two centres are mainly service centres to the eight faculties, and in addition, offer only non-degree courses, they have been collapsed into one group to facilitate data analysis.

Table 3

Distribution of Respondents by Faculty/Centre
(N=169)

Faculty/Centre	Respondents No.	Respondents %	Population No.	Population %
Arts & Soc.Sciences	24	14.2	136	17.7
Dentistry	6	3.6	24	3.1
Econ. & Pub.Admin.	19	11.2	78	10.2
Education	14	8.3	50	6.5
Engineering	10	5.9	46	6.0
Law	6	3.6	26	3.3
Medicine	36	21.3	158	20.6
Science	33	19.5	159	20.7
Centre for Foundation Studies in Science	3	1.8	14	1.8
Language Centre	18	10.7	78	10.2
Total	**169**	**100.0**	**768**	**100.0**

Positions held. When respondents were grouped on the basis of administrators and fulltime instructors (Table 4), the data revealed that approximately 20 percent held administrative positions in addition to reduced teaching loads and about 80 percent were fulltime instructors.

Table 4

Distribution of Respondents by Position
(N=169)

Position held	Frequency	Percentage
Administrator	34	20.1
Instructor	135	79.9
Total	**169**	**100.0**

Age distribution. Most respondents (165) fell within the age range of 26 to 54 years. The data revealed that only one respondent was under 26 years old. About 34 percent were in the 26 to 35 years age group. Approximately 41 percent were in the 36 to 45 years age group. About 23 percent were in the 46 to 54 years age group and approximately 2 percent were over 55 years of age. In order to facilitate data analysis the age groups were collapsed into three ranges: 35 years and under, 36 to 45 years, and 46 years and over. The data are illustrated in Table 5.

Table 5

Distribution of Respondents by Age
(N=169)

Age	**Frequency**	**Percentage**
Under 26	1	0.6
26-35 yrs.	57	33.7
36-45 yrs.	70	41.4
46-54 yrs.	38	22.5
55 yrs. and over	2	1.2
Not reported	1	0.6
Total	**169**	**100.0**

Tenure status. As shown in Table 6, the majority of the respondents(approximately 89 percent) have been confirmed in their appointments. About 7 percent were on probation and approximately 4 percent were on contract.

Table 6

Distribution of Respondents by Tenure Status
(N=169)

Tenure status	**Frequency**	**Percentage**
Confirmed	151	89.3
On probation	12	7.1
On contract	6	3.6
Total	**169**	**100.0**

Highest degree held. When respondents were grouped on the basis of the highest degrees held (Table 7), the data revealed that approximately 66 percent had doctorates and about 30 percent had Masters degrees and only about 2 percent had bachelors degrees, diplomas or certificates. For data analysis, the four groups were collapsed into three groups. The three groups were doctorates, masters, and bachelors, diplomas and certificates.

Table 7

Distribution of Respondents by Highest Degree
(N=169)

Highest degree	**Frequency**	**Percentage**
Doctorates	109	64.5
Masters	51	30.2
Bachelors, Diplomas and Certificates	7	4.2
Not reported	2	1.2
Total	**169**	**100.0**

Year in which highest degrees were obtained. In terms of the year when the highest degrees were earned (Table 8), 55 percent of the respondents obtained them between 1973 and

1982. Approximately 40 percent received them between 1963 and 1972. About 4 percent obtained theirs between 1953 and 1962.

Table 8

Distribution of Respondents by Year of Highest Graduation (N=169)

Year	Frequency	Percentage
1973-1982	93	55.0
1963-1972	68	40.2
1953-1962	6	3.6
Not reported	2	1.2
Total	**169**	**100.0**

Countries from which highest degrees were received. As is exhibited in Table 9, the distribution of respondents in terms of countries from which the highest degrees were received was: Malaysia and Singapore, 33 percent;United Kingdom, 31 percent; the United States, 19 percent; Canada, 5 percent; Australia and New Zealand, 7 percent; and, the rest of Asia(excluding Malaysia and Singapore), 5 percent. In order to facilitate data analysis, the six groups were collapsed into five groups, namely, Malaysia and Singapore, United Kingdom, the United States and Canada, Australia and New Zealand, and the rest of Asia.

Table 9

Distribution of Respondents by Country of Degree
(N=169)

Country	Frequency	Percentage
Malaysia&Singapore	56	33.1
United Kingdom	52	30.8
U.S.	32	18.9
Canada	8	4.7
Australia & N.Zealand	11	6.5
Asia(excluding Malaysia & Singapore)	8	4.7
Not reported	2	1.2
Total	**169**	**100.0**

Academic rank distribution. Table 10 reveals that more than half (57 percent) of the respondents were lecturers. Twenty-four percent were associate professors and 12 percent were professors. Approximately 7 percent of the respondents fell into the category of language teacher.

Table 10

Distribution of Respondents by Academic Rank
(N=169)

Academic Rank	Frequency	percentage
Language teacher	11	6.5
Lecturer	97	57.4
Associate professor	41	24.3
Professor	20	11.8
Total	**169**	**100.0**

Pedagogical training. The majority of the respondents (78 percent) did not have any form of pedagogical training at degree, diploma or certificate level(Table 11).

Approximately 22 percent of the respondents had pedagogical training in addition to their academic qualifications.

Table 11

Distribution of Respondents by Pedagogical Training
(N=169)

Ped.training	Frequency	Percentage
Yes	37	21.9
No	132	78.1
Total	169	100.0

Years of teaching experience at the University of Malaya. Table 12 reveals that 33 percent of the respondents had 1 to 5 years of teaching experience. Approximately 35 percent had 6 to 10 years. About 20 percent had 11 to 15 years. Approximately 11 percent had 16 to 20 years and another 1 percent had over 20 years of experience. For data analysis, the five groups were collapsed into four groups, namely, 1 to 5 years, 6 to 10 years, 11 to 15 years, and 16 years or more.The average number of years of teaching experience of the respondents was 8.7 years at the University of Malaya.

Table 12

Distribution of Respondents by Years of Teaching Experience (University of Malaya) (N=169)

Experience	Frequency	Percentage
1-5 years	56	33.0
6-10 years	59	34.9
11-15 years	34	20.1
16-20 years	18	10.8
21 yrs. and over	2	1.2
Total	**169**	**100.0**

Total years of university teaching experience. As is exhibited in Table 13, approximately 30 percent of the respondents had 1 to 5 years of university teaching experience in total. About 36 percent had 6 to 10 years and approximately 18 percent had given 11 to 15 years of service. Another 12 percent had 16 to 20 years of total university teaching experience and approximately 4 percent had taught in universities for more than 21 years. It should be pointed out that the respondents had most of their teaching experience at the University of Malaya. The difference between the average number of years of teaching experience at the University of Malaya and the university teaching experience in total, inclusive of the experience gained at the University of Malaya, is less than a year.

Table 13

Distribution of Respondents by Total Years of University Teaching Experience (N=169)

Experience	Frequency	Percentage
1-5 years	51	30.2
6-10 years	61	36.1
11-15 years	30	17.8
16-20 years	21	12.5
21 years and over	6	3.6
Total	**169**	**100.0**

CHAPTER 5

PRESENTATION AND ANALYSIS OF FINDINGS

The purpose of this chapter is to relate the findings which are relevant to sub-problems 1, 2, 3 and 4. These sub-problems are concerned with:

1. determination of perceptions of needs relative to specified objectives of instructional development;
2. determination of perceptions of methods of instructional development;
3. determination of perceptions of organizational arrangements for instructional development; and,
4. determination of perceptions of issues and obstacles in instructional development.

The major purpose of this study was to determine the nature and extent of the need for instructional development activities as perceived by academic staff at the University of Malaya. In addition, the study attempted to discern differences in the perceptions of need for instructional development held by two specified sub-groups, i.e. academic staff who do not hold administrative positions and academic staff who also hold administrative positions in addition to reduced teaching loads in the eight faculties and two centres, as well as the relationships if any, of various sub-group characteristics to the perceptions shown.

Objectives of Instructional Development

Research Question 1: *What are the perceived needs of academic staff at the University of Malaya relative to specified objectives of instructional development, including the four general areas of objectives: instructional methodology, content expertise, student needs and contextual factors (university setting)?*

In order to obtain information for this research question a Likert-type rating scale was used. The Mean Scores on items were used as an indicator of perceived need for the objectives of instructional development; the items were then grouped into four approximately equal size categories. Table 14 describes the categories which were derived.

Table 14

Distribution of the Objectives of Instructional Development by Category

Degree of Need	**MS Range**	**No.of Items**	**Range of Ranks**	**Percentage of items in the 4 general areas of I.D.***			
				IM	**CF**	**SN**	**CE**
High	3.72-4.20	14	1-14	36%	7%	14%	14%
Fairly High	3.40-3.71	20	15-33	32%	21%	29%	57%
Moderate	3.23-3.39	15	34-49	25%	29%	14%	29%
Low	2.49-3.22	14	50-63	7%	43%	43%	
				100%	**100%**	**100%**	**100%**

Areas of Instructional Development*:
IM: Instructional methodology
SN: Student needs
CF: Contextual factors
CE: Content expertise

The overall Mean Score of the 63 items was 3.42 indicating a generally high level of need. Even the "low" category reflects some need for development(see Table 35 in Appendix B for Mean Scores of all the items). Of the 14 top-rated items, three items related to the area of instructional methodology, -- improved skills in Bahasa Malaysia, increased understanding of the methods of self-evaluation and increased understanding of the basic methods of teaching and learning, -- were assigned the highest mean ratings of 4.20, 4.17 and 4.12 respectively. Conversely, in the low group, three items related to the area of student needs, -- increased understanding of students' socio-economic status, developing a sensitivity for students' cultural differences and increased understanding of the structure and functions of the university student body, -- were assigned the lowest mean ratings of 2.79, 2.76 and 2.49 respectively.

When items were grouped by general area(Table 15), "instructional methodology" had the highest mean score and "student needs" the lowest. Tables 14 and 15 are consistent in reflecting a higher concern for "instructional methodology" and "content expertise" and a lower concern for "student needs", and "contextual factors". However, all four areas must be regarded as important area of objectives for instructional development.

Table 15

Mean Scores of Four General Areas of Objectives of Instructional Development

Areas	No. of Obj.	MS	SD
Instructional Methodology	28	3.60	0.67
Content expertise	7	3.49	0.48
Contextual factors	14	3.24	0.66
Student needs	14	3.21	0.71

Table 16 exhibits the 14 items that were assigned the highest mean ratings. Ten of the 14 items are related to the area of instructional methodology. Table 17 shows 14 items for which the respondents perceived "low" need. Of the 14 items, the areas of student needs and contextual factors had 6 items each and the area of instructional methodology had 2; the area of content expertise had none.

Tables 14, 15 and 16 are consistent in depicting "instructional methodology" as a relatively high need area and "student needs" as a relatively low need area for staff development.

Table 16

Instructional Development Objectives
Receiving High Mean Score Ratings
(N=169)

Item No	Objective	MS	SD	Rank	Type of Obj*
51.	Improved skills in Bahasa Malaysia in teaching	4.20	0.92	1	IM
25.	Increased understanding of the methods of using self-evaluation of teaching performance	4.17	0.83	2	IM
24.	Increased understanding of the basic methods of teaching and learning	4.12	0.89	3	IM
29.	Increased understanding of theories of teaching and learning in adult education	3.95	1.01	4	IM
1.	Increased understanding of the philosophy of university education	3.92	0.92	5	CF
32.	Increased understanding of discussion techniques in teaching	3.87	0.93	6	IM
53.	Improved skills in teaching reasoning and creative thinking	3.83	0.84	7.5	IM
28.	Increased understanding of ways to prepare independent study materials	3.83	0.96	7.5	IM
14.	Increased understanding of the general psychology of the adult student	3.81	0.86	9.5	SN

Table 16 (continued)

Item No	Objective	MS	SD	Rank	Type of Obj*
33.	Increased understanding of educational innovations in universities	3.81	0.85	9.5	IM
50.	Improved skills in using audio-visual equipment and materials in teaching and learning	3.79	0.91	11	IM
38.	Increased knowledge of current trends and research in your area of specialization	3.75	0.92	12	CE
15.	Increased understanding of the motivation of the adult student	3.73	0.88	13	SN
26.	Increased understanding of ways of reinforcing learning	3.72	0.93	14	IM

Type of Objective*
IM: Instructional methodology
CF: Contextual factors
SN: Student needs
CE: Content expertise

Table 17

Instructional Development Scores
Receiving Low Mean Score Ratings
(N=169)

Item No	Objective	MS	SD	Rank	Type of Obj*
4.	Increased understanding of political and socio-economic factors influencing your university	3.16	1.11	50	CF
56.	Improved diction and projection	3.13	0.84	51	IM
2.	Increased understanding of conditions of employment	3.12	0.96	52	CF
8.	Increased understanding of your expected involvement in university extracurriculum activities	3.06	0.96	53	CF
44.	Improved skills in grouping students for instru tion	3.05	0.87	54	IM
11.	Increased understanding of the career opportunities available to graduates of your university	2.99	0.99	55	CF
60.	Developing a sensitivity for students' emotional and social needs	2.96	0.98	56	SN
20.	Increased understanding of students' aspirations	2.94	1.12	57	SN
16.	Increased understanding of the "youth culture"	2.85	0.88	58	SN
12.	Increased understanding of the structure and working of the government of Malaysia	2.83	0.88	59	CF

Table 17 (continued)

Item No	Objective	MS	SD	Rank	Type of Obj*
10.	Increased understanding of the Malaysian society	2.82	1.16	60	CF
31.	Increased understanding of students' socio-economic status	2.79	0.96	61	SN
61.	Developing a sensitivity for students' cultural differences	2.76	1.07	62	SN
18.	Increased understanding of the structure and fuctions of the university student body	2.49	1.02	63	SN

Type of Objective*
IM: Instructional methodology
CF: Contextual factors
SN: Student needs
CE: Content expertise

Research Question 2: *What are the differences in perceived needs between academic staff in the eight faculties and two centres at the University of Malaya relative to specified objectives of instructional development?*

As the Centre for Foundation Studies in Science and the Language Centre are mainly service centres to the eight faculties and, in addition, offer only non-degree programmes, they have been collapsed into one group to facilitate data analysis.

Table 18 shows the overall mean scores of objectives as perceived by the different faculties and the centre. The data indicated that all nine respondent groups gave overall mean ratings ranging from 2.99 to 3.86 for the 63 instructional development objectives (Table 36 in Appendix B provides total data). The mean score for ~~the~~ Faculty of Education falls into the category of "high" need; Faculties of Economics and Public administration, Law, and Centre for Foundation Studies in Science and the Language Centre fall into the category of "fairly high" need. Faculties of Medicine, Arts and Social Sciences and Science fall into the category of "moderate" need. Faculties of Engineering and Dentistry have come under the category of "low" need. The ONEWAY analysis of variance procedure($p \leq .05$) indicated that some statistically significant comparisons of pairs of mean scores existed. The Scheffé Multiple Comparison of Means Test($p \leq .1$) was used to locate these comparisons. The difference in mean scores between education and dentistry and between education and engineering are statistically significant.

Table 18

Differences in Overall Mean Scores of Perceived Need for Objectives by Faculties and Centres

Faculty/Centre	N	MS	SD	F	P	Scheffé (p≤.1)
Arts & Soc.Sciences	24	3.36	0.45	3.39	0.00	4-2,4-5
Dentistry	6	2.99	0.47			
Econ. & Pub.Admin.	19	3.58	0.37			
Education	14	3.86	0.36			
Engineering	10	3.12	0.29			
Law	6	3.47	0.33			
Medicine	36	3.39	0.38			
Science	33	3.35	0.58			
Centres	21	3.46	0.54			

Table 19 exhibits the thirteen objectives of instructional development which indicated significant differences among the eight faculties and the centre.

Also shown are the pairs of groups where these differences are located. Table 20 derived from Table 19, summarizes these significant comparisons.

Table 19

Mean Scores of Objectives Which Indicate Significant Differences
Among Participating Faculties/Centre *

(N=169)

Item No	Objective	Type of Obj**	Grp1* N=24 MS	Grp2* N=6 MS	Grp3* N=19 MS	Grp4* N=14 MS	Grp5* N=10 MS	Grp6* N=6 MS	Grp7* N=36 MS	Grp8* N=33 MS	Grp9* N=21 MS	Overall F	Overall P	Scheffé (p≤.1)
3.	Increased understanding of the role of guidance and counselling services in your university	CF	3.63	2.83	3.58	4.00	2.50	3.50	3.33	3.42	3.19	2.43	0.02	4-5
6.	Increased understanding of the functions of administration in your university	CF	3.58	2.67	3.05	3.79	2.70	3.33	3.97	2.85	3.05	5.47	0.00	5-7,7-8
7.	Increased understanding of the community service and human resources available to your university	CF	3.08	3.00	2.95	4.00	2.30	3.00	3.72	3.30	3.05	3.92	0.00	4-5,5-7
16.	Increased understanding of the "youth culture"	SN	2.88	2.83	2.95	3.64	2.60	2.83	2.44	2.67	3.33	4.00	0.00	4-7,7-9 4-8
19.	Increased understanding of students' inadequacies	SN	3.46	2.83	3.32	4.07	2.40	2.83	3.33	3.58	3.71	3.34	0.00	4-5
27.	Increased understanding of methods of constructing instruments for evaluating students' progress	IM	3.38	3.33	4.32	4.36	3.40	3.83	3.36	3.24	3.81	5.20	0.00	3-8,3-7 3-1,4-8 4-7
28.	Increased understanding of ways to prepare independent study materials	IM	3.79	3.33	4.52	4.36	3.40	4.00	3.72	3.45	4.00	3.35	0.00	3-8

Item No	Objective	Type of Obj**	Grp1* N=24 MS	Grp2* N=6 MS	Grp3* N=19 MS	Grp4* N=14 MS	Grp5* N=10 MS	Grp6* N=6 MS	Grp7* N=36 MS	Grp8* N=33 MS	Grp9* N=21 MS	Overall F	Overall P	Scheffé (p≤.1)
38.	Increased knowledge of current trends and research in your area of specialization	CE	3.79	3.17	4.11	4.36	4.00	3.50	3.22	3.67	4.10	3.94	0.00	4-7
41.	Improved skills in using the lecture technique	IM	3.04	2.83	4.00	4.21	3.10	3.67	2.75	3.36	3.38	5.77	0.00	3-7,4-7 4-1
55.	Improved basic knowledge within your area of specialization	CE	3.17	3.00	3.95	3.86	3.40	2.83	2.89	3.09	3.57	3.03	0.00	3-7
56.	Improved diction and projection	IM	2.96	2.83	3.32	3.71	3.40	3.00	2.72	3.42	3.00	3.33	0.00	4-7
60.	Developing a sensitivity for students' emotional and social needs	SN	2.83	2.67	3.00	4.00	2.40	2.83	3.00	2.67	3.14	3.32	0.00	4-5,4-8 4-1
61.	Developing a sensitivity for students' cultural differences	SN	2.79	2.50	2.68	3.71	2.30	2.83	2.58	2.48	3.14	2.62	0.01	4-8

Type of Objective**
IM: Instructional methodology
CF: Contextual factors
SN: Student needs
CE: Content expertise

Faculties/Centre*
Grp1*: Arts & Soc.Sciences
Grp2*: Dentistry
Grp3*: Econ.& Pub.Admin.
Grp4*: Education
Grp5*: Engineering
Grp6*: Law
Grp7*: Medicine
Grp8*: Science
Grp9*: Centre for Foundation Studies in Science and Language Centre

Table 20

Number of Significant Comparisons
Between Faculties/Centre

	Faculty/Centre								
	Arts.	Dent.	Econ.	Educ.	Eng.	Law	Med.	Sci.	Cntr.
Total	3	0	6	15	6	0	12	7	1
Higher	0	-	6	15	0	-	3	0	1
Lower	3	-	0	0	6	-	9	7	0

As shown in Table 20, education appeared in fifteen comparisons. In all cases the mean score for education was higher than the comparison group. Medicine was involved in twelve statistically significant comparisons. In nine cases medicine had a lower mean score than the comparison group; in three cases it was higher. Economics appeared in six comparisons. In all cases, it perceived higher need than the comparison group. Likewise, science was involved in seven statistically comparisons and in all cases the mean score for science was lower than the comparison group.

Research Question 3: *What are the differences in perceived needs among academic staff relative to specified objectives of instructional development, when grouped according to various sub-group characteristics?*

For the purpose of this research question the following variables were identified as sub-group characteristics of the respondents:

1. position (administrator or instructor);
2. academic rank (language teacher, lecturer, associate professor, and professor);
3. tenure status (confirmed staff, on probation, and on contract);
4. sex (male or female);
5. age (35 years or younger, 36-45 years, and 46 years or older);
6. highest academic qualification (Bachelor, Masters, or Doctorate);
7. year when highest degree was earned (1973-1982, 1963-1972 and 1953-1962);
8. country from which the highest degree was earned (Malaysia and Singapore, United Kingdom, the United States and Canada, Australia and New Zealand, and, the rest of Asia excluding Malaysia and Singapore);
9. pedagogical training (yes or no); and,
10. number of years of teaching experience at the University of Malaya (1-5 years, 6-10 years, 11-15 years, and 16 years or more).

The *t*-test procedure was used to determine differences between mean scores of subgroup pairs. For this test a level of significance of .05 was chosen.

In each category of variable where there were three or more groups, the ONEWAY analysis of variance and Scheffè procedure was used as before.

Position. The difference in mean scores for administrators and instructors was not statistically significant. For a detailed comparison by specific objectives see Table 37 in Appendix B.

A total of 10 (approximately 16 percent) of the objectives produced significant differences between administrators' and instructors' perceptions of need for instructional development (Table 21). Each of the areas of instructional methodology, content expertise and student needs had three significantly different objectives. The area of contextual factors had only one.

The Spearman Rho Correlation Coefficient Test was administered to determine the degree of agreement in the ranking orders of instructional development objectives as perceived by administrators and instructors. A high degree of agreement was found among the two respondent groups. The Spearman Rho Correlation Coefficient was 0.78 which is significant beyond the .001 level.

Table 21

Mean Scores of Instructional Development
Objectives Which Indicate Significant Differences
Between Administrators and Instructors
(N=169)

Item No	Objective	Type of Obj	Adminrs. N=34 MS	Adminrs. N=34 SD	Instrs. N=135 MS	Instrs. N=135 SD	T	P
9.	Increased understanding of the implications of accountability for the university lecturer's role	CF	3.74	0.86	3.36	0.98	2.02	0.05
17.	Increased understanding of the methods to diagnose students' educational needs	SN	3.94	0.89	3.58	0.84	2.23	0.03
35.	Increased understanding of fields related to your own teaching specialization	CE	3.29	1.00	3.69	0.92	-2.20	0.03
37.	Increased practical expertise in your area of specialization	CE	3.14	1.05	3.54	0.90	-2.20	0.03
38.	Increased knowledge of current trends and research in your area of specialization	CE	3.41	0.93	3.83	0.90	-2.40	0.02
46.	Improved skills in preparing materials for programmed, multi-media approaches to teaching	IM	3.91	0.75	3.53	0.95	2.21	0.03
60.	Developing a sensitivity for students' emotional and social needs	SN	3.29	0.72	2.87	1.02	2.78	0.00
61.	Developing a sensitivity for students' cultural differences	SN	3.09	1.14	2.67	1.04	2.04	0.04

Item No	Objective	Type of Obj	Adminrs. N=34 MS	Adminrs. N=34 SD	Instrs. N=135 MS	Instrs. N=135 SD	T	P
62.	Developing strategies for evaluating instructional objectives	IM	3.59	0.93	3.23	0.84	2.19	0.03
63.	Developing strategies which will enable students to participate in designing their learning experiences	IM	3.71	0.87	3.25	0.97	2.49	0.01

Type of Objective
IM: Instructional methodology
CF: Contextual factors
SN: Student needs
CE: Content expertise

Rank. The overall mean scores for the four categories of the academic ranks, namely, lecturer, associate professor, professor and language teacher are shown in Table 22.

Table 22

Differences in Mean Scores of Objectives Based on Academic Ranks

Group	Academic Rank	N	MS	SD	F	P	Scheffè ($p \leq .1$)
1	Lecturer	97	3.49	0.43	4.99	0.00	1-3,2-3 4-3
2	Assoc.Professor	41	3.47	0.45			
3	Professor	20	3.07	0.58			
4	Lang.Teacher	11	3.61	0.52			

Using the same categories as before (see Table 14), the lecturer, associate professor and language teacher groups perceived a "fairly high" need while the professor group perceived a "low" need.The differences in mean scores for professors and each of the other groups are statistically significant.

Degree. The overall mean scores for the three groups of respondents, namely, Doctorate holders, Masters holders, and Bachelor or Diploma holders are shown in Table 23.

Table 23

Differences in Mean Scores of Objectives
Based on the Highest Degree Earned

Group	Degree	N	MS	SD	F	P	Scheffé (p≤.1)
1	Doctorate	109	3.41	0.49	5.20	0.01	1-2, 1-3
2	Masters	51	3.64	0.40			
3	Bachelors/ Diploma	7	3.65	0.51			

The mean score of respondents with doctorates is statistically lower than that of the other two groups, although falling in the same category of "fairly high need."

Year of graduation. The overall mean scores for the three groups of respondents, namely, Group 1: those who earned their highest degrees between 1973 and 1982; Group 2: between 1963 and 1972; and Group 3: between 1953 and 1962 are exhibited in Table 24.

Table 24

Differences in Mean Scores of Objectives
Based on the Year When the Highest Degree was Earned

Group	Year	N	MS	SD	F	P	Scheffé (p≤.1)
1	1973-1982	93	3.52	0.42	6.77	0.00	2-3, 1-3, 1-2
2	1963-1972	68	3.34	0.49			
3	1953-1962	6	2.90	0.72			

Group 1 perceived a "fairly high" need, Group 2 perceived a "moderate" need, and Group 3 perceived a "low" need for instructional development objectives. Each group differed significantly from the others in terms of mean scores. That is the group with the greatest lapsed time since completing the highest degree expressed the least need for instructional development, while the group with the least lapsed time expressed the highest need.

Pedagogical training. Table 25 compares overall mean scores for respondents with pedagogical training (Group 1) and those without (Group 2). Group 1 perceived a "fairly high" need (MS 3.56) while Group 2 perceived a "moderate" need (MS 3.38). The difference in mean score was statistically significant.

Table 25

Differences in Mean Scores of Objectives
Based on Pedagogical Training

Group	Pedagog. Training	N	MS	SD	T	P
1	Some	37	3.56	0.55	2.03	0.04
2	None	132	3.38	0.45		

Teaching experience at the University of Malaya. Table 26 summarizes the overall mean scores of the respondents when grouped by years of teaching experience at the University of Malaya.

Table 26

Differences in Mean Scores of Objectives
Based on Years of Teaching Experience
at the University of Malaya

Group	Experience	N	MS	SD	F	P	Scheffé ($p \leq .1$)
1	1-5 yrs.	56	3.42	0.47	4.90	0.02	1-4, 2-4
2	6-10 yrs.	59	3.44	0.39			
3	11-15 yrs.	34	3.39	0.52			
4	16 yrs.or over	20	3.01	0.66			

Groups 1 (1-5 years) and 2 (6-10 years) perceived a "fairly high" need and group 3 (11-15 years) perceived a "moderate" need. Group 4(16 years or more) perceived a "low" need. Group 4 (16 years or over) was significantly lower statistically than either group 1 or 2.

Other variables. There were no statistically significant differences among the respondent groups on the bases of sex, age, tenure, and, the country from which the highest degree was earned in relation to the overall mean scores on objectives of instructional development.

Methods of Instructional Development

Research Question 4: *What are the perceived suitable methods for the acquisition of the knowledge and skills implied in the specified objectives of instructional development?*

For the purpose of obtaining suitable methods for the acquisition of the knowledge and skills implied in the 63 objectives that were drawn from four general areas, namely, contextual factors, student needs, instructional methodology and content expertise the sixty-three objectives were summarized into 16 objectives. These summarized objectives fall into the four general areas as follows:

Contextual factors:

1. Increased understanding of public service obligations.
2. Increased understanding of university service obligations.
3. Increased understanding of access to instructor supports.
4. Increased understanding of access to student supports.

Student needs:

5. Increased understanding of student psychology (individual).
6. Increased understanding of student body (sociological).
7. Increased understanding of instructor skills in dealing with students.

Instructional methodology:

8. Increased understanding of theories of learning.
9. Increased understanding of communication skills.
10. Increased understanding of specific teaching techniques.
11. Increased understanding of ways of preparing curriculum materials.
12. Increased understanding of evaluation of student learning.
13. Increased understanding of the use of audio-visual aids.

14. Increased understanding of preparatory techniques.
15. Increased understanding of evaluation of own performance.

Content expertise:

16. Increased understanding of latest developments, current trends and research findings in one's area of specialization.

Table 27 presents the distribution of instructional methods by summarized objectives. For example, in the case of objective #1, 29 percent of the respondents rated method #1 as the preferred approach, whereas only 3.6 percent rated method #6 as the preferred approach. The method receiving the highest percentage response is deemed to be the single most appropriate method for reaching that particular objective and they are underlined for emphasis in the table.

Table 27
Frequency and Percentage Distribution of Best Instructional Methods by Objectives

Summarized Objectives	Type of Obj.	Methods* 1	%	2	%	3	%	4	%	5	%	6	%
1. Increased understanding of public service obligations	CF	49	29.0	10	5.9	45	26.6	22	13.0	37	21.9	6	3.6
2. Increased understanding of university service obligations	CF	40	23.7	12	7.1	43	25.4	22	13.0	48	28.4	4	2.4
3. Increased understanding of access to instructor supports	CF	12	7.1	49	29.0	31	18.3	5	3.0	61	36.1	11	6.5
4. Increased understanding of access to student supports	CF	21	12.4	38	22.5	43	25.4	3	1.8	54	32.0	10	5.9
5. Increased understanding of student psychology (individual)	SN	26	15.4	5	3.0	31	18.3	44	26.0	48	28.4	15	8.9
6. Increased understanding of student body (sociological)	SN	22	13.0	7	4.1	65	38.5	44	26.0	20	11.8	11	6.5
7. Increased understanding of instructor skillsin dealing with students	SN	8	4.7	43	25.4	29	17.2	11	6.5	29	17.2	49	29.0
8. Increased understanding of theories of learning	IM	42	24.9	17	10.1	21	12.4	74	43.8	8	4.7	7	4.1
9. Increased understanding of communication skills	IM	12	7.1	59	34.9	53	31.4	7	4.1	17	10.1	21	12.4
10. Increased understanding of specific teaching techniques	IM	12	7.1	73	43.2	28	16.6	13	7.7	11	6.5	32	18.9
11. Increased understanding of ways of preparing curricula materials	IM	5	3.0	33	19.5	50	29.6	14	8.3	31	18.4	36	21.3

Summarized Objectives	Type of Obj	Methods* 1	%	2	%	3	%	4	%	5	%	6	%
12. Increased understanding of evaluation of student learning	IM	10	5.9	16	9.5	60	35.5	16	9.5	32	18.9	35	20.7
13. Increased understanding of the use of audio-visual aids	IM	2	1.2	149	88.2	3	1.8	5	3.0	4	2.4	6	3.6
14. Increased understanding of preparatory techniques	IM	7	4.1	60	35.5	28	16.6	9	5.3	17	10.1	48	28.4
15. Increased understanding of evaluation of own performance	IM	7	4.1	18	10.7	41	24.3	25	14.8	57	33.7	21	12.4
16. Increased understanding of latest developments, current trends and research findings in your area of specialization	CE	13	7.7	7	4.1	7	4.1	128	75.7	9	5.3	5	3.0

Methods*: 1=lecture 3=group processes 5=consultation
2=demonstration 4=private reading/study 6=guided practice

Table 28

Distribution of Objectives by Most Favoured Method

Method	**Objectives**
1	1
2	9, 10, 13, 14
3	6, 11, 12
4	8, 16
5	2, 3, 4, 5, 15
6	7

The data in Table 28 which is derived from Table 27 show that all methods have a place in Instructional Development, but the most versatile is "consultation," (5) followed by "demonstration," (2) and "group processes" (3). However it must be noted that not all objectives are equally weighted. For example, objective "16 encompasses developments in one's field of expertise--an important objective for any professional. This is best acquired by private reading and study.

Research Question 5: *What are the differences between academic staff in the eight faculties and two centres at the University of Malaya regarding perceived suitable methods for the acquisition of knowledge and skills implied in the specified objectives of instructional development?*

The data as presented in Table 29 indicated that among the nine respondent groups, on the whole, there was more agreement than disagreement in terms of selection of single most appropriate methods for approaching each of the sixteen summarized objectives (Table 29).

Table 29

Single Most Appropriate Method for Approaching
Each Summarized Objective by Faculty/Centre

Item No.	Summarized Objectives	Grp1* N=24	Grp2* N=6	Grp3* N=19	Grp4* N=14	Grp5* N=10	Grp6* N=6	Grp7* N=36	Grp8* N=33	Grp9* N=21	Number of Methods Selected
1.	Increased understanding of public service obligations	1	5	3	3	5	5	3	1	1	3
2.	Increased understanding of university service obligations	1	5	3	3	5	5	4	3	1	4
3.	Increased understanding of access to instructor supports	5	2	5	5	5	5	5	5	5	2
4.	Increased understanding of access to student supports	5	5	5	5	5	5	3	2	5	3
5.	Increased understanding of student psychology (individual)	5	5	5	5	4	3	3	5	4	3
6.	Increased understanding of student body (sociological)	3	3	3	3	4	1	3	3	3	3
7.	Increased understanding of instructor skillsin dealing with students	6	6	2	2	6	2	6	6	5	3
8.	Increased understanding of theories of learning	1	1	4	4	4	4	1	4	4	2
9.	Increased understanding of communication skills	3	2	3	3	2	3	3	3	3	2
10.	Increased understanding of specific teaching techniques	2	2	2	2	6	2	2	3	2	3
11.	Increased understanding of ways of preparing curricula materials	3	6	6	6	6	6	2	3	3	3

Item No. Summarized Objectives	Grp1* N=24	Grp2* N=6	Grp3* N=19	Grp4* N=14	Grp5* N=10	Grp6* N=8	Grp7* N=36	Grp8* N=33	Grp9* N=21	Number of Methods Selected
12. Increased understanding of evaluation of student learning	3	6	4	4	3	3	3	3	6	3
13. Increased understanding of the use of audio-visual aids	2	2	2	2	2	2	2	2	2	1
14. Increased understanding of preparatory techniques	3	2	6	6	5	5	2	2	2	4
15. Increased understanding of evaluation of own performance	5	5	5	5	5	5	3	5	4	3
16. Increased understanding of latest developments, current trends and research findings in your area of specialization	4	4	4	4	4	4	4	4	4	1
Number of Methods Selected	**6**	**6**	**5**	**5**	**5**	**6**	**6**	**6**	**6**	
Methods Omitted			**1**	**1**	**1**					

Methods
1: Lecture
2: Demonstration
3: Group processes
4: Private reading/study
5: Consultation
6: Guided practice

Faculties/Centre
Grp1*: Arts & Soc. Sc.
Grp2*: Dentistry
Grp3*: Econ. & Pub.Admin.
Grp4*: Education
Grp5*: Engineering
Grp6*: Law
Grp7*: Medicine
Grp8*: Science
Grp9*: Centre for Foundation Studies in Sc. & Lang. Centre

When the single most appropriate methods for each of the sixteen summarized objectives were further analysed, the data showed that there was complete consensus on two objectives (#13, #16); while most disagreement (4 selections) occurred on items #2 and #14. All groups selected all methods for at least one objective with the exception of groups 3, 4 and 5 which for no objective selected "lecture" as the most favoured method.

Research Question 6: *What are the differences among academic staff regarding perceived suitable methods for the acquisition of the knowledge and skills implied in the specified objectives of instructional development, when grouped according to various sub-group characteristics?*

The same ten variables that were identified as sub-group characteristics of respondents for Research Question 3 in Sub-problem 1 were used here to obtain information for this research question.

Table 30 shows a comparison of percentage of agreement on single most appropriate method for approaching each of the sixteen summarized objectives based on various sub-group characteristics of respondents. An agreement of 100 percent means that all groups selected the same single best method for approaching a specified objective; an agreement of 75 percent means that three out of four of the groups selected the same single best method. Where there are two groups 100 percent and 0 percent are possibilities; with three groups 100 percent, 67 percent and 0 percent, and with four groups 100 percent, 75 percent, 50 percent and 0 percent, and so forth.

Table 30

Degree of Agreement Among Different Sub-groups on Single Most Appropriate Method for Approaching the Summarized Objectives

Subgroup characteristics	Groups	Degree of agreement(Specific Objectives)
Position	1.Administrator(N=34) 2.Instructors(N=135)	100 % in 13 obj.(2-10,12,13,15,16) No agreement in 3 obj.(1,11,14)
Academic rank	1.Lecturer(N=97) 2.Assoc.Prof.(N=41) 3.Professor(N=20) 4.Lang.Teacher(N=11)	100 % in 2 obj.(13,16) 75 % in 8 obj.(3, 4, 6,8,10,12,15) 50 % in 6 obj.(1, 2, 5,7,9,14)
Tenure position	1.Confirmed(N=151) 2.On probation(N=12) 3.On contract(N=6)	100 % in 6 obj.(6, 9, 10,13,14,16) 67 % in 8 obj.(2, 3, 4,5,7,8,12,15) No agreement in 2 obj.(1,11)
Sex	1.Male(N=108) 2.Female(N=61)	100 % in 12 obj.(1,3-6,8,10-13,15,16) No agreement in 4 obj.(2,7,9,14)
Age	1.Under 35 yrs.(N=58) 2.36-45 yrs.(N=70) 3.46 yrs.or over(N=40)	100 % in 6 obj.(3, 8, 10,12,13,16) 67 % in 9 obj.(2,4,5,6,7,9,11,14,15) No agreement in 1 obj.(1)
Highest degree	1.Doctorate(N=109) 2.Masters(N=51) 3.Bachelors,Cert. & Diplomas(N=7)	100 % in 5 obj.(7,8,11,13,16) 67 % in 8 obj.(3-6,9,10,14,15) No agreement in 3 obj.(1,2,12)
Year of the highest degree	1.1973-1982(N=93) 2.1963-1972(N=68) 3.1953-1962(N=6)	100 % in 8 obj.(3,8,10-13,15,16) 67 % in 8 obj.(1,2,4,6,7,9,14)

Subgroup characteristics	**Groups**	**Degree of agreement(Specific Objectives)**
Country from which highest degree was earned	1.Malaysia & Singapore (N=56) 2.United Kingdom(N=52) 3.United States & Canada(N=40) 4.Australia & New Zealand(N=11) 5.Asia(excluding Malaysia & Singapore(N=8)	100 % in 7 obj.(6,10,12-16) 80 % in 1 obj.(8) 60 % in 7 obj.(1-3,5,7,9,11) 40 % in 1 obj.(4)
Pedagogical training	1.Yes(N=37) 2.No(N=132)	100 % in 12 obj.(3-8,10-14,16) No agreement in 4 obj.(1,2,9,1)
Yrs.of teaching experience at the University of Malaya	1.1-5 yrs(N=56) 2.6-10 yrs(N=59) 3.11-15 yrs(N=34) 4.16 yrs.or more(N=20)	100 % in 5 obj.(8,10,12,13,16) 75 % in 7 obj.(3-7,14,15) 50 % in 4 obj.(1,2,9,11)

It is evident from Table 30 that there was a high degree of agreement among the respondents when grouped by the sub-group characteristics in the selection of single most appropriate methods for approaching most of the sixteen summarized objectives. The data also revealed two striking points:

1. There was 100 percent agreement among respondents in all group conformations in selecting "demonstration" and "private reading/study" methods as the single most appropriate methods in terms of specified objectives, namely, increased understanding of the use of audio-visual aids, and increased understanding of the latest developments, current trends and research findings in one's area of specialization, respectively.
2. There was less and in some cases no agreement among the respondents when grouped in the various conformations in the selection of single most appropriate methods in relation to specific objectives, namely, increased understanding of public service obligations and increased understanding of university service obligations.

These results are consistent with the findings for Research Question 5.

Organizational Arrangements for Instructional Development

Research Question 7: *What are the perceived actual and preferred organizational arrangements among academic staff for instructional development at the University of Malaya?*

For the purpose of obtaining information related to this research question as well as the subsequent ones, different organizational arrangements were drawn from seven areas, namely:

1. provisions for encouraging participation;
2. timing;
3. sources of expertise;
4. structures for instructional development;
5. origins of ideas;
6. recognition of instructional development activities; and,
7. leadership role in implementing instructional development activities.

To obtain data for the first six areas, respondents were asked to indicate their perceptions by circling the appropriate number on each response scale, of actual practices and preferred practices, relating to the manner in which the university-supported staff development programmes are implemented. A special computer programme was written to calculate the demand scores (DS). The method for calculating the DS for each item was: Preferred score (PS) minus Actual score (AS) plus five, to eliminate any negative scores. The highest possible demand score would be nine indicating the highest need to stress that particular item more than at present, a score of five would indicate that an acceptable emphasis presently exists. A score of less than five in a particular aspect of faculty development would suggest that there is more than the optimum provision for faculty development in that aspect.

The *t*-test procedure was used to compare mean demand scores with two comparison groups, and one way ANOVA with more comparison groups, as before.

The mean demand score was used as an indicator of the balance emphasis placed on various organizational arrangements for instructional development. Using the magnitude of the mean demand scores, 28 items of organizational arrangements for instructional development were grouped into four categories in order to permit analysis of types of areas which appeared to have high demand scores as well as those for which there seemed to be low demand scores. Table 31 describes the categories which were derived in this manner. It should be noted that the category labelled "low", having a range of scores(5.35-6.40) still indicates the need for greater emphasis than at present.

Table 31

Degrees of Demand Scale
for Organizational Arrangements
for Instructional Development

Degree	**MDS Range**	**No.of Items**
High	7.15-7.86	8
Fairly High	6.82-7.14	8
Moderate	6.41-6.81	6
Low	5.35-6.40	6

Table 32 summarizes the mean demand scores and ranks by the total sample for the 28 items under six areas in the organization of instructional development programmes at the University of Malaya.

The mean demand score for the 28 items ranged from a low 5.35 to a high 7.86. The overall mean demand score was 6.76. This indicates a general perception of need for more attention to organizational arrangements for staff development. Of note is the fact that even the lowest rated item reflected a desire on the part of the respondents for more attention than at present.

Table 32

Mean Demand Scores and Ranks of Organizational Arrangements for Implementing Instructional Development Programme
(N=169)

Organizational Arrangements	**MDS**	**SD**	**Rank**
1. Provisions encouraging participation in instructional development:			
1.1. Special recognition of excellent staff	7.78	0.92	2
1.2. Circulation of newsletter	7.86	1.07	1
1.3. Time allocation during the university year	7.01	1.07	7
1.4. Periodic reviews of the staff performance	5.35	1.42	12
1.5. Sabbatical leaves with salary	5.68	0.87	11
1.6. Unpaid leaves	6.20	1.16	10
1.7. Reduced teaching load for first year staff	6.72	1.11	8
1.8. Temporary teaching load reductions	7.20	1.24	5
1.9. Travel grants to refresh or update knowledge	7.50	1.02	3
1.10. Travel funds to attend professional conferences	7.10	0.90	6
1.11. Visiting scholars programme	6.49	0.96	9
1.12. Campus committees on staff development	7.48	0.99	4

Table 32 (continued)

Organizational Arrangements	MDS	SD	Rank
2. Times at which instructional development activities held:			
2.1. During university term	6.56	1.10	2
2.2. During the long vacation	6.95	1.11	1
3. Sources of expertise:			
3.1. Academic staff	7.15	1.06	1
3.2. Outside consultants	6.44	0.99	3
3.3. Deans of faculties	6.41	1.08	4
3.4. Heads of Departments	6.86	1.30	2
4. Structures used for implementing instructional development activities:			
4.1. Workshops	6.96	1.08	2
4.2. Field experience	7.15	1.02	1
4.3. Conference	6.60	1.16	5
4.4. Internship	6.84	1.09	3
4.5. Interview	6.82	0.97	4
5. Sources of awareness:			
5.1. Students	5.68	0.92	4
5.2. Administrators	5.94	1.12	3
5.3. Lecturers	6.16	0.91	2
5.4. Academic staff committee	7.11	1.16	1
6. Incentive System:			
6.1 Recognition of instructional development activities	7.32	1.01	
Overall	**6.76**	**0.51**	

The following sections present the findings on needed improvements for the total sample under six areas.

Provisions for encouraging participation. Of the 12 items in this area, circulation of newsletters, articles and the like that are pertinent to teaching improvement was ranked first with a mean demand score of 7.86. By scoring a mean demand score of 7.78, special recognition of staff for excellence in teaching was placed second. Sabbatical leaves with salary and periodic reviews of the performance of all staff members were ranked at the bottom with mean demand score of 5.68 and 5.35 respectively.

Timing. Instructional development activities to be held during long vacation received higher mean demand score (6.95) than instructional development activities to be held during university term (6.56).

Sources of expertise. The sources for providing expertise or content inputs into instructional development activities in order of emphasis to be placed were (1)the university's own academic staff (7.15), (2)heads of departments/ divisions (6.86), (3)specialist consultants from outside the university (6.44) and (4) deans of faculties (6.41).

Structural arrangements. The highest mean demand score was for field experience, i.e.temporary placement in a related organization(7.15). This was followed by workshops with a mean demand score of 6.96. Conference, as an organizational arrangement for implementing instuctional development activities was ranked last (6.60).

Sources of awareness. In terms of influencing academic staff's ideas of instructional development activities, respondents ranked academic staff committee as first (7.11). Second came lecturers (6.16). Placed at the bottom in the rank order were administrators (5.94) and students (5.68).

Recognition of the importance of instructional development activities. By assigning a mean demand score of 7.32, respondents indicated a higher emphasis in this area than is currently the case.

Leadership role in implementing instructional development activities. In order to obtain information for this seventh area, that is, leadership role in implementing instructional development activities, a Likert-type rating scale was used as in Sub-problem 1. Respondents were asked to circle the appropriate number on the response scale to indicate only their *preferred* emphases on items in this area. The mean score was used as an indicator of perceived need for items in the areas of leadership role in implementing instructional development activities.

In terms of assuming leadership role in the implementation of instructional development programmes and activities at the University of Malaya, the total sample gave the highest mean score ratings to heads of departments/divisions (MS 4.17) and the individual instructor (3.99). The lowest mean score rating of 2.65 was assigned to the Academic Staff Association (Table 33).

Table 33

Mean Scores and Rank Order of Preferred Leadership Role in the Implementation of Instructional Development Activities Based on Type of University Personnel (N=169)

Personnel	MS	SD	Rank
Heads of Depts./Divs.	4.17	0.97	1
The Individual Instructor	3.99	0.99	2
A Standing Committee	3.82	1.02	3
Deans of Faculties	3.79	1.02	4
Directors of Centres	3.72	1.02	5.5
Vice-Chancellor	3.72	1.19	5.5
Deputy ViceChancellor (Adm. & Establishment)	3.33	1.22	7.5
D.V.C. (Development, Research & Finance)	3.33	1.19	7.5
D.V.C.(Student Affairs)	3.15	1.06	9
Academic Staff Assn.	2.65	1.19	10

Research Question 8: *What are the differences between academic staff in the eight faculties and two centres at the University of Malaya regarding perceived preferred organizational arrangements for instructional development?*

The overall mean demand scores for the nine respondent groups ranged from a low 6.58 to a high 7.02. On the degrees of demand scale as shown in Table 31, the nine respondent groups' perceived demand for organizational arrangements ranged from "moderate" to "fairly high" demand. There were no statistically significant differences by type of faculty and centre. Table 38 in Appendix B provides the total data.

Research Question 9: *What are the differences among academic staff regarding perceived preferred organizational arrangements for instructional development, when grouped according to various sub-group characteristics?*

Position. There were no statistically significant differences in overall mean demand scores between administrator and instructor groups.

The Spearman Rho Correlation Coefficient Test was administered to determine the degree of agreement in the ranking order of organizational arrangements for instructional development as perceived by administrators and instructors. A very high degree of agreement was found among the two respondent groups. The Spearman Rho Correlation Coefficient was 0.92 which is significant beyond the .001 level. It is therefore concluded that there were no differences in the perceptions of administrators and non-administrators regarding organizational arrangements for instructional development.

The Spearman Rho Correlation Coefficient Test was administered to determine the degree of agreement in the ranking order of different levels of university personnel for assuming leadership role for implementing instructional development activities. A high degree of agreement was found among the two respondent groups. The Spearman Rho

Correlation Coefficient was 0.79 which is significant beyond the .003 level. It is therefore concluded that there were no differences in the preferences of administrators and non-administrators regarding the locus of leadership for instructional development.

Teaching experience at the University of Malaya. The overall mean demand scores of the respondents when grouped by years of teaching experience at the University of Malaya are summarized in Table 34.

Table 34

Differences in Overall Mean Demand Scores of Organizational Arrangements Based on Years of Teaching Experience at the University of Malaya

Group	Experience	N	MDS	SD	Overall F	Overall P	Scheffé ($p \leq .1$)
1	1-5 yrs.	56	6.87	0.42	2.36	0.04	1-4
2	6-10 yrs.	59	6.78	0.58			
3	11-15 yrs.	34	6.64	0.49			
4	16 yrs.and over	20	6.40	0.51			

Respondents with 16 or more years of teaching experience at the University of Malaya, by assigning an overall mean demand score of 6.40, perceived a "low" demand, but respondents with 1 to 5 years of teaching experience perceived a "fairly high" demand on the categorization of degrees of demand scale. There was a regular decrease in overall mean demand score with increasing years of experience by group. However only group 1 and 4 differed by a statistically significant degree.

Other variables. There were no statistically significant differences in the overall mean demand scores among the respondent groups on the bases of sex, tenure, age, academic rank, highest degree earned, year when the highest degree was earned, country from which the highest degree was earned and pedagogical training in relation to the 28 organizational arrangements of instructional development.

There were no significant differences in the mean preference scores among the respondents when grouped on the bases of academic rank, tenure, sex, age, the highest degrees earned, country from which the highest degrees were earned, pedagogical training (yes/no) and the number of years of teaching experience at the University of Malaya in relation to the different levels of university personnel for assuming leadership role in implementing instructional development activities at the University of Malaya. From these data the conclusion is reached that sub-group characteristics have no influence on the respondents' views of leadership preferences.

Issues and Obstacles

Thirty structured interviews were held with administrators and instructors chosen randomly. These were not included in the questionnaire sample. The purpose of the interviews was to provide supplementary data. Responses to the second part of the interview involving issues and obstacles in instructional development provided the information for this section. Three lead questions were used as follows:

1. What are the major perceived issues relating to Staff Development at the University of Malaya?
2. What are the major perceived obstacles to Staff Development?
3. What are some proposed ways and means of overcoming these obstacles?

These generated diverse responses which are not presented by interviewee but are aggregated around six issues which provide a framework for reporting.

Issue 1: Degrees vs Skills

A significant number of interviewees pointed out that the University of Malaya is spending more of its Staff Development funds and time in sending its newly recruited and recently confirmed staff members overseas to obtain higher degrees. The interviewees felt that the university has come a long way in establishing itself as the premier university in the country. Therefore, they suggested that the university recruit its academic staff from those who have already earned their doctorates on their own. In this manner, much of the money and time allotted for staff development purposes could be utilized for planning and conducting activities that would improve the teaching capabilities of staff members at the University of Malaya.

Issue 2: Teaching vs Research

From the inception of the University of Malaya, much emphasis has been given to research capability and some to professional experience of staff members but little to staff members' teaching performance. This has been demonstrated in confirming persons in the position of lectureship and in promoting persons from positions of lecturers to associate professors and finally to professors. Most of the interviewees were of the opinion that the lack of recognition of teaching capabilities has inadvertently prompted a large number of staff to excel in research at the expense of acquiring new and effective teaching skills. The university's bias toward research has also been demonstrated by the absence of a staff development programme or seminars and workshops on an ongoing basis. Only now, the university administration has begun sponsoring seminars and workshops on improving teaching. In order to make these activities meaningful to the staff and eventually to be beneficial to the students, the interviewees suggested that the university administration should take into account the nature of the needs of its staff members and students for instructional development. It was suggested that equipment related to instructional technology be purchased for every faculty according to its needs. Each and every faculty member should be given the opportunity to learn under qualified technicians and experienced instructors to use the equipment to the maximum in his or her teaching. Furthermore, staff development activities should be institutionalized and there should be adequate annual allocation in the budget for this purpose. Even in times of financial difficulties, this allocation should continue to enjoy its priority position in the budget. By striking a balance between research and teaching excellence, the University of Malaya can serve as a centre of excellence in teaching in the country.

Issue 3: Evaluation of Teaching

At present, a staff member's teaching capability is assessed by the number and type of courses he or she offers and the number of students enrolled in these courses. There are no procedures such as self evaluation, peer evaluation, administrator evaluation and student evaluation of one's teaching. A number of interviewees expressed a keen interest in learning the procedures involved in different types of evaluation of one's teaching.

Issue 4: Basic Philosophy and Role of the University

A substantial number of interviewees stated that a large number of newly recruited staff members as well as some experienced ones are in need of understanding the basic philosophy of the university. The interviewees felt that this aspect is crucial if the university is to maintain its current position in the academic world. It was suggested that this could be achieved by holding continual consultations with renowned local and foreign university staff members as well as attending lectures and seminars on the subject. From time to time, leading staff members and university administration should make such activities available to all staff members.

Issue 5: Language of Instruction

Interviewees pointed out that, although the current proficiency in Bahasa Malaysia classes at various levels conducted by the Language Centre of the University of Malaya for university staff members are helpful, they are not sufficient. By providing more released time, more staff well-qualified in the national language and funds on an ongoing basis, the university can provide facilities in addition to the formal classes mentioned above. This can be done from time to time by assessing the different needs of the staff members in the eight faculties and two centres. There should be easy access to language consultants, seminars, workshops and books on terminology and other related resources. Such facilities should be provided on a departmental basis.

Issue 6: Voluntarism vs Compulsion

For instructional development activities to be successful, interviewees felt that, by and large, the activities should be planned and conducted by more experienced and master teachers for their colleagues. Only in a non-threatening milieu, would many staff members participate in instructional development activities on a voluntary basis. Besides providing regular financial support for such activities, the university administration should be prepared to share the leadership in the implementation of instructional development programmes. It was also the opinion of the majority of interviewees that instructional development activities should be institutionalized and run within the university by master teachers and consultants from overseas.

Summary

In this chapter the findings of the study were presented and analyzed under objectives, methods, organizational arrangements and issues.

Objectives. Responses from the total sample indicated that there was a perceived need for instructional development in all the four skill areas of instructional development. However, when the 63 items were grouped by general area, "instructional methodology" had the highest mean score and "student needs" the lowest.

Respondents from the education group had the highest mean score, which was significantly higher statistically than dentistry or engineering. Respondents below the rank of professor, respondents who fall into the youngest of the age groups, respondents who earned their highest degrees most recently and respondents who had less than sixteen years of experience indicated a relatively high concern for instructional development objectives, while respondents who fall into the oldest age group, respondents who received their highest degrees earlier and respondents who had sixteen or more years of experience expressed a relatively low concern.

The mean scores of respondents with pedagogical training reflected a higher need than those without it.

Methods. All methods have a place in instructional development, but the most versatile is "consultation, " followed by "demonstration, " and "group processes." There was a high degree of agreement among the respondents when grouped by the sub-group characteristics.

Organizational Arrangements. The overall mean demand score of 6.76 indicated a general perception of need for more attention to organizational arrangements for staff development. Even the lowest rated item reflected a desire on the part of the respondents for more attention than at present.

Regarding leadership in the implementation of instructional development activities, respondents expressed their preference in the following order: heads of departments, the individual instructor and a standing committee. There were no statistically significant differences among the respondents when they were grouped by the sub-group characteristics.

Issues. Six issues were identified from the interview data. They were: degrees vs skills, teaching vs research, evaluation of teaching, basic philosophy and role of the university, language of instruction and voluntarism vs compulsion.

CHAPTER 6

DISCUSSION OF FINDINGS

The four sub-problems set out for the study and stated below are discussed in this chapter.

1. Determination of perceptions of need relative to specified objectives of instructional development.
2. Determination of perceptions of methods of instructional development.
3. Determination of perceptions of organizational arrangements for instructional development.
4. Determination of perceptions of issues and obstacles in instructional development.

At this point it should be noted that this study had a high rate of response from the randomly drawn sample within the specified time. A return of 81 percent of the questionnaires and willingness on the part of the interviewees can be viewed as indicating that the study was timely and relevant to University of Malaya.

Perceptions of Needs Relative to Specified Objectives of Instructional Development

It is apparent from the findings that of the four general areas of instructional development objectives the instructional methodology and content expertise areas were perceived to be the most important components of the instructional development programme. Ten of the top 14 items were related to instructional methodology. Conversely, of the 14 lowest items six items related to each of the areas of student needs and contextual factors, indicating a perception of greater competence in these skill areas.

The above findings are strongly supported by the information derived from the interviews..

High ratings for objectives related to instructional methodology indicate the highest need to stress that particular area more than at present. This inference is supported by the research findings of Gaff (1975) and Kozma and Associates (1978) that many universities give most recognition to content expertise and research, some recognition to understanding of student needs and little recognition to instructional methodology.

The objective -- improved skills in Bahasa Malaysia in teaching -- received the highest rating in the rank order of the 63 objectives. This suggests that the stress placed on this skill in university and government policy is not matched by the curricular and organizational supports needed to achieve this end.

In accordance with the new education policy of the Government of Malaysia, which came into being in 1970, all educational institutions, including universities, have been in the process of switching the medium of instruction from

English to Bahasa Malaysia. Beginning in the 1983 academic year, all universities are expected to use Bahasa Malaysia as the medium of instruction.

Another observation supporting the high need for improved skills in the national language is that according to the 1981/1982 University of Malaya calendar, approximately 65 percent of the academic staff are foreign-trained in countries in which the medium of instruction is English. Therefore, there is an urgent need for the more systematic provision of facilities and encouragement for the academic staff to attain fluency in the National language.

It is interesting to note that education had the highest mean need score for objectives of instructional development, which was significantly higher statistically than dentistry or engineering. This could mean that almost every member of the education group, having had prior pedagogical training and being actively involved in upper secondary school teacher preparation at the university, is likely to have perceived a higher need for instructional development objectives for the whole university. Conversely, the majority of the respondents in dentistry and engineering, having had no prior teacher training, may not have realized the importance of the need for instructional development objectives to the extent of the education group. This finding suggests a general proposition as follows: the greater the academic staff member's pedagogical training the greater will be the perceived need for instructional development. This proposition is further supported by the comparison of mean scores based on academic staff with pedagogical training and without pedagogical training. Respondents with pedagogical training perceived a higher need for instructional development objectives than respondents without pedagogical training.

When the academic staff were grouped into administrators and full-time instructors, the difference in mean scores between the two groups was not statistically significant. This is an important finding. It suggests that the possibilities for concerted institutional initiatives are very good because of the apparent agreement of administrators and instructors on key aspects of instructional development.

The fact that both perceived a high need for instructional development objectives may be that the administrators too may have viewed themselves basically as instructors as their administrative positions are tenable for a fixed period of time after which they become full-time instructors. These findings do not suggest, as do differ from Garrison(1967) and Gaff(1975) that administrators often do not know their colleagues well enough to know what they need.

A comparison of data in terms of respondents' academic ranks, age groups, the highest degree earned and the year when the highest degree was earned resulted in an interesting pattern. Respondents holding the ranks of lecturer and language teacher and respondents who fell into the youngest of the age groups and respondents with lower academic qualification and respondents who earned their highest degrees most recently, generally perceived a higher need for instructional development objectives than did those with the opposite characteristics. These findings are consistent with reports in the literature. For example, Centra (1977) indicated that instructors with ten or more years of teaching experience in postsecondary institutions tended to show a decline in their interest in instructional development activities.

Perceptions of Methods of Instructional Development

The data show that all methods have a place in Instructional Development but the most versatile is "consultation" followed by "demonstration, " and "group processes." "Lecture" and "guided practice" were seen to be relevant for -- increased understanding of public service obligations and increased understanding of instructor skills in dealing with students -- respectively. The total sample's selection of "consultation" and "demonstration" methods as the most suitable ones reflect their preference to participate in programmes that involve a high degree of active, personal involvement. Without exception every group selected "private reading and study" method as the most appropriate method to keep up-to-date with the latest developments in one's area of specialization.

The data as presented in Table 29 indicate that among the nine respondent groups, on the whole, there was more agreement than disagreement in terms of selection of the most appropriate methods for approaching the sixteen summarized objectives.

Likewise from Table 30 it is evident that there was a high degree of agreement among the respondents when grouped by the sub-group characteristics. Based on these findings, it may be reasonably surmised that the respondents' affiliations with different faculties and their sub-group characteristics are not related to preferred methods of instructional development to a significant extent. Thus consideration of methods should be based more on objectives than on client group characteristics.

Perceptions of Organizational Arrangements for Instructional Development

An overall mean demand score of 6.76 for 28 items in this section by the total sample is a clear indication of a need for more attention to organizational arrangements, as specified in the questionnaire, for an instructional development programme.

Eight arrangements for instructional development were given high ratings, indicating strongly the need for more attention. Five of them were in the area of motivation of staff to participate, which suggests that the reward system at the University of Malaya is not used up to its potential. It is feasible for the university to implement most of these arrangements as they are not high cost items and come within the provisions of the existing budget, for example, recognizing the importance of instructional development activities, and honouring excellent teaching staff.

In the interview data too the major point to emerge was the strong need for recognition of excellence in teaching by the university administration. This point is reflected and emphasized in various forms in the six issues that have been identified in the preceding chapter. Furthermore, these findings support the research findings of Jabker and Halinski(1978), who conducted a study at Illinois University on the benefits and rewards accrued by faculty members who participated in an instructional development programme. The success of the instructional development programme was contingent on an effective reward system. These findings are consistent with the literature.

The "high" rating for field experience, (i.e. temporary placement in a related organization) supports the findings of Cohen and Brawer(1972) and Gaff(1975).

In terms of origins of ideas for instructional development activities, respondents' preference for an academic staff committee is consistent with the views of Redditt and Hamilton (1978). By involving instructors in the planning and by encouraging them to be part of the administration of the instructional development programme, the ownership of the programme rests with the instructors. This type of ownership builds a commitment and a sense of responsibility for and to the programme.

With regard to sources of expertise and leadership role in implementing instructional development activities, the respondents' preference for heads of departments followed by individual instructors is consistent with the findings of Hammons and Wallace(1976).The head of a department is the person who may be most effective in instructional improvement, elevating standards and overcoming communications problems between instructors and administrators. Recent literature reflects the significance of the departmental head's role.

On the whole, by not finding any statistically significant differences in their perceptions and by assigning an overall mean demand score of 6.76, all the nine respondent groups regardless of their discipline affliations have expressed a positive demand for the specified organizational arrangements.

When the respondents were grouped into administrators and instructors, the difference in mean demand scores between these two groups was not statistically significant. It should be pointed out here that this finding is similar to the finding of the two respondent groups with regard to instructional development objectives.

In the leadership role in implementing instructional development activities too, a high level of agreement was found between the two groups.

There were no statistically significant differences in the overall mean demand scores among the respondent groups on the bases of academic rank, tenure position, sex, age, the highest academic degree, year when the highest degree was earned, country from which the highest degree was earned, pedagogical training and the number of years of teaching experience at the University of Malaya. This could be viewed as indicating that irrespective of their sub-group characteristics, the subjects responded, in a similar manner with regard to organizational arrangements.

On the whole, a parallel can be seen in the sub-group perceptions of need for instructional development objectives and perceptions of demand for organizational arrangements. In both instances, respondents in the youngest age group tended to perceive a higher need than those in the oldest age group.

Perceptions of Issues and Obstacles

It is evident from the issues and obstacles identified from the interview data that there is a high degree of need for attention to instructional development. The relatively high stress on teaching skills, recognition of excellence in teaching, understanding of the basic philosophy and role of the university, improvements in Bahasa Malaysia and preference for voluntarism in instructional development activities, support the findings of the questionnaire, and provide useful guidelines for programme priorities.

It is one thing to recognize needs, but it is a far greater challenge to implement provisions to address those needs in a complex organization such as a university. Any strategy for improving teaching in the university should consider, first, the leverages of power which can be used to initiate staff members in the process of change. A pragmatic analysis of the structure and distribution of power should precede any decisions about organizational structure (Steers, 1977). While the allocation of power within most universities appear similar to organizational charts, the internal exercise of this power is different from each institution. In some institutions, the vice-chancellors are powerful; in others the department chairperson is essential for stimulating change. Instructors, administrators and students, all have a share in the allocation of power, and they attempt to exercise it according to their perceptions of how much they have. Therefore, time spent in analyzing these groups is not wasted. The same techniques used by the behavioral scientists to assess social class are useful in this context.

In accepting or rejecting a change, its relative advantage, complexity and its compatibility with existing value systems as perceived by individuals are important (Rogers, 1962). Administrators should keep these factors in mind when planning their strategies for change. In view of the complex nature of a university organization, attempts to bring about changes have to be cautious and, an incremental approach is recommended.

In general, there is considerable evidence in this study to indicate an overall need for instructional development at the University of Malaya. In terms of strategies for implementation, it may be appropriate to focus initially on those instructors who expressed the highest need for the objectives of development and, by their example, to influence the attitudes of the others.

CHAPTER 7

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of the Study

The purpose of the study was to contribute to the data base relevant to planning and organizing instructional development programmes and activities at the University of Malaya. More specifically,the study sought to determine from academic staff:

1. Perceptions of needs related to specified objectives of instructional development.
2. Perceptions of methods of instructional development.
3. Perceptions of organizational arrangements for instructional development.
4. Perceptions of issues and obstacles in instructional development.

In addition, the study attempted to discern differences in the perceptions held by various sub-groups of academic staff.

The methodology of the research utilized two coordinated techniques in gathering data, namely a questionnaire and interview. The questionnaire brought a total response of 169 out of 211 individuals (81 percent) randomly chosen for the study from all of the eight faculties and two centres at the University of Malaya. Thirty interviews were held with administrators and instructors chosen randomly. These were not included in the questionnaire sample.

The information gathered from the questionnaire was classified according to the following independent variables: (1) by faculties/centre, (2) position (administrator or instructor) , (3) academic rank, (4) tenure, (5) sex, (6) age, (7) academic qualification, (8) year the highest degree was earned, (9) country from which the highest degree was earned, (10) pedagogical training and (11) number of years of teaching experience at the University of Malaya.

Responses generated by the interview questions were grouped around six issues.

Conclusions

The principal findings that emerged from this investigation were:

Objectives

1. There is a high level of need for attention to instructional development at the University of Malaya.
2. Although the perceived need for all four skill areas of instructional development ranged from 'moderate' to 'high', the instructional methodology skill area was perceived to be the most important component of an instructional development programme.
3. Ranking of the skill areas: content expertise, contextual factors and student needs as second, third

and fourth respectively can be viewed as an indication of the relative priorities of these other areas.

4. Faculty of Education members perceived a significantly higher need for instructional development objectives than the members of the Faculties of Dentistry and Engineering.
5. When the respondents were grouped into administrators and instructors there were no statistically significant differences between the two groups.
6. Respondents below the rank of professor perceived a relatively high concern for instructional development while respondents in the rank of professor perceived a relatively low concern.
7. Respondents with highest degrees below that of doctorate perceived a relatively higher need than those with doctorates.
8. Respondents with the greatest lapsed time since completing the highest degree expressed the least need for instructional development, while those with the least lapsed time expressed the highest need.
9. Staff members with pedagogical training perceived a higher need for instructional development than those without it.
10. Respondents with less than sixteen years of university teaching experience perceived a relatively high concern for instructional development while those with sixteen

and more years perceived a relatively low concern.

11. There were no statistically significant differences among the repondents on the bases of sex,age,tenure position,and, the country from which the highest degree was earned.

Methods

12. "Consultation" and "demonstration" methods were perceived to be the most versatile (suitable) ones for attaining the knowledge and skills outlined by the objectives.
13. There was a very high degree of agreement among the respondents in the selection of "demonstration" and "private reading and study" methods for increased understanding of the use of audio-visual aids and increased understanding of the latest developments, current trends and research findings in an individual's area of specialization, respectively.
14. There was a high degree of agreement among the respondents when grouped into sub-groups in the selection of single most appropriate methods for approaching most of the sixteen summarized objectives.

Organizational Arrangements

15. The overall mean score of 6.76 indicated a general perception of need for more attention to organizational arrangements. Even the lowest rated item reflected a

desire on the part of the respondents for more attention than at present.

16. Eight arrangements for instructional development were given high ratings. Five of them were in the area of motivation of staff to participate in instructional development programmes.
17. There is a high need for the circulation of newsletters and articles that are pertinent to teaching improvement or staff development. There is also a high need for special recognition of staff members who excel in teaching.
18. There is less need to stress sabbatical leaves with salary and periodic reviews of the performance of all staff members.
19. There is a high need for field experience, i.e.temporary placement in a related organization.
20. There is a preference for an academic staff committee to generate ideas for instructional development programmes.
21. Heads of departments are preferred for sources of expertise and leadership in planning, organizing and implementing instructional development activities.
22. There were no significant differences based on sub-group characteristics.

Issues and Obstacles

23. Respondents identified the following to be the major

issues related to instructional development:

a. Degrees vs skills.

b. Teaching vs research.

c. Evaluation of teaching.

d. Basic philosophy and role of the university.

e. Language of instruction.

f. Voluntarism vs compulsion.

24. Respondents perceived the following to be the obstacles in approaching the issues:

    a. Much of the funds allotted for staff development purposes are being used mainly to assist staff members to obtain higher degrees.

    b. Confirmation and promotion of staff members are based mainly on research and publication.

    c. Absence of procedures to evaluate teaching likely do not encourage instructors to become better teachers.

    d. Facilities to assist instructors to become proficient in Bahasa Malaysia are inadequate.

    e. Funding for instructional development activities, in general, is inadequate.

Recommendations

It is evident from the aforementioned findings that there is a need for instructional development at the University of Malaya. Based on the findings of the questionnaire and interviews, the following recommendations are made:

1. Information derived from this study should be communicated to the body of academic staff at the University of Malaya, and opportunities provided for discussion and clarification of the findings.
2. The university administration should clearly indicate its commitment to excellence in teaching. This may be demonstrated by activities like offering annual teaching awards and giving due recognition to competence in teaching. At present recognition of competence for confirmation of new appointments and achievement for promotion is based mainly on research and publication.
3. Among the skill areas involved in instructional development programmes greater emphasis should be assigned to skills in instructional methodology.
4. Facilities to improve staff members' proficiency in Bahasa Malaysia (the National Language) should be increased at virtually all levels: in the department, in the faculty, and in the Language Centre. This should be done immediately as all faculties and centres have switched to Bahasa Malaysia as the medium of instruction beginning in the 1983 academic year.
5. A committee of "master teachers" nominated from within various faculties should be set up to establish the criteria for excellence in teaching and to propose procedures to evaluate -- in a formative sense -- the

teaching performance of individual instructors so as to help them become better instructors.

6. There should be sufficient flexibility in instructional development programmes. The programmes must be diverse enough to meet the varied needs and demands of sub-groups among staff-members, e.g. those without pedagogical training.
7. The University of Malaya should establish an inventory of internal resources for "consultation" and "demonstration" in various instructional techniques.
8. Efforts should be made to ensure a regular circulation among staff members of newsletters and articles pertinent to teaching improvement or staff development.
9. The university administration in cooperation with the private and public sectors should work out a system by which some of its staff members could be placed temporarily in a related organization. Acquisition of such field experience would enable concerned staff members to experience the practical aspects of their fields of specialization. This would benefit instructors and students in disciplines undergoing constant changes.
10. Participation in all activities conducted and sponsored by the University of Malaya should be on a voluntary basis. Only in a nonthreatening milieu can any form of staff development hope to achieve its goals.

11. It is evident from the findings that there is a need for instructional development at the University of Malaya, and furthermore that attention needs to be paid to focussing on appropriate objectives, using the instructional development methods most appropriate to these objectives, and engendering the full commitment of the institution and its leaders. One way to provide a critical focus for leadership would be by creating a formal centre for instructional development. Such a centre would have to be adequately funded and recognized as an integral part of the university.

Suggestions for Further Research

Based on the findings of this study, a number of suggestions for further research are made. Studies based on the ideas outlined here would lead to further expansion of knowledge relating to instructional development in universities.

1. The feasibility of various modes of instructional evaluation including administrator, peer, student and self-evaluation.
2. The impact of voluntarism versus compulsion in participation in instructional development activities.
3. The impact of instructional development opportunities and activities on teaching behaviour.
4. Students' perceptions of instruction and suggestions for

instructional improvement.

5. Studies of professional development needs in areas not covered in this study, for example professional relationships, research capabilities and personal improvement.
6. Feasibility of the establishment of a centre to provide a focus for instructional development activities.

Previous research on instructional development has been conducted within narrowly defined conceptual frameworks which have been based on content and process models. The study of educational administration offers a broad range of conceptualizations which have potential for contributing new dimensions to research on instructional development. Among relevant conceptualizations are those related to organizational structure, planned change as well as the politics and economics of organizational change. The potential contribution of these conceptualizations to future research should be explored in relation to specific problems such as the ones which have been recommended.

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APPENDIXES

APPENDIX A

INSTRUMENTS

SURVEY QUESTIONNAIRE

A SURVEY OF THE PERCEIVED NEED FOR INSTRUCTIONAL DEVELOPMENT AT THE UNIVERSITY OF MALAYA

SECTION I

BIOGRAPHICAL DATA

1. Faculty/Centre (Check one)

   a. Faculty of Arts and Social Sciences ____
   b. Faculty of Dentistry ____
   c. Faculty of Economics and Administration ____
   d. Faculty of Education ____
   e. Faculty of Engineering ____
   f. Faculty of Law ____
   g. Faculty of Medicine ____
   h. Faculty of Science ____
   i. Centre for Foundation Studies in Science ____
   j. Language Centre ____

2. Department ______________________________

3. Academic Rank (Check one)

   a. Lecturer ____
   b. Associate Professor ____
   c. Professor ____
   d. Language Teacher ____
   e. Other (Specify) ________________________ ____

4. Do you hold an administrative position? (Check one)

   a. Yes (Specify) ________________________ ____
   b. No ____

5. Your position at the University of Malaya (Check one)

   a. Confirmed staff ____
   b. On probation ____
   c. On contract ____
   d. Other (Specify) ________________________ ____

6. Your sex (Check one)

   a. Male ___

   b. Female ___

7. Your age is (Check one)

   a. under 26 ___

   b. 26-35 ___

   c. 36-45 ___

   d. 46-54 ___

   e. over 55 ___

8. Academic preparation (from most recent to earliest):

Name of Institution	Country	Degree, Diploma, or Certificate completed	Year
___	___	___	___
___	___	___	___
___	___	___	___

9. Pedagogical (teaching) training (from most recent to earliest):

Name of Institution	Country	Degree, Diploma, or Certificate completed	Year
___	___	___	___
___	___	___	___

Other training ___

10. Main field of study or teaching specialization ___

11. Years of teaching experience (include current year)

   a. Total university teaching ___ Yrs.

   b. Teaching at the University of Malaya ___ Yrs.

   c. Teaching in primary school ___ Yrs.

   d. Teaching in secondary school ___ Yrs.

   e. Other (Specify) ___ ___ Yrs.

6

SECTION II

OBJECTIVES OF UNIVERSITY INSTRUCTIONAL DEVELOPMENT

Instructions

Listed below are a number of objectives related to university instructional development and to needs of academic staff. For each item, you are asked to respond by circling a number on each scale.

The numbers of the scale correspond to the following ratings:

1=none or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

Precede each item with the phrase -- in terms of your perception of the academic staff at the University of Malaya, to what extent is there a need for:

1. Increased understanding of the philosophy of university education. 1 2 3 4 5
2. Increased understanding of conditions of employment. 1 2 3 4 5
3. Increased understanding of the role of guidance and counselling services in your university. 1 2 3 4 5
4. Increased understanding of political and socio-economic factors influencing your university. 1 2 3 4 5
5. Increased understanding of the operations and functions of your university's/faculty's educational media centre (includes library). 1 2 3 4 5
6. Increased understanding of the functions of administration in your university. 1 2 3 4 5
7. Increased understanding of the community service and human resources available to your university. 1 2 3 4 5
8. Increased understanding of your expected involvement in university extracurricular activities. 1 2 3 4 5
9. Increased understanding of the implications of accountability for the university lecturer's role. 1 2 3 4 5
10. Increased understanding of the Malaysian society. 1 2 3 4 5
11. Increased understanding of the career opportunities available to graduates of your university. 1 2 3 4 5
12. Increased understanding of the structure and working of the government of Malaysia. 1 2 3 4 5

Response key: 1=none or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

13. Increased understanding of student behavior. 1 2 3 4 5

14. Increased understanding of the general psychology of the adult student. 1 2 3 4 5

15. Increased understanding of the motivation of the adult student. 1 2 3 4 5

16. Increased understanding of the "youth culture". 1 2 3 4 5

17. Increased understanding of the methods to diagnose students' educational needs. 1 2 3 4 5

18. Increased understanding of the structure and functions of the university student body. 1 2 3 4 5

19. Increased understanding of students' inadequacies. 1 2 3 4 5

20. Increased understanding of students' aspirations. 1 2 3 4 5

21. Increased understanding of instructor's role in student-initiated activities. 1 2 3 4 5

22. Increased openness to students' viewpoints. 1 2 3 4 5

23. Increased understanding of instructor's responsibility in helping students outside regular classes. 1 2 3 4 5

24. Increased understanding of the basic methods of teaching and learning. 1 2 3 4 5

25. Increased understanding of the methods of using self-evaluation of teaching performance. 1 2 3 4 5

26. Increased understanding of ways of reinforcing learning. 1 2 3 4 5

27. Increased understanding of methods of constructing instruments for evaluating students' progress. 1 2 3 4 5

28. Increased understanding of ways to prepare independent study materials. 1 2 3 4 5

29. Increased understanding of theories of teaching and learning in adult education. 1 2 3 4 5

30. Increased understanding of the uses of group dynamics. 1 2 3 4 5

31. Increased understanding of students' socio-economic status. 1 2 3 4 5

32. Increased understanding of discussion techniques in teaching. 1 2 3 4 5

33. Increased understanding of educational innovations in universities. 1 2 3 4 5

34. Increased understanding of the philosophy of your discipline. 1 2 3 4 5

Response key: 1=none or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

35. Increased understanding of fields related to your own teaching specialization. 1 2 3 4 5

36. Increased knowledge of your professional association(s). 1 2 3 4 5

37. Increased practical expertise in your area of specialization. 1 2 3 4 5

38. Increased knowledge of current trends and research in your area of specialization. 1 2 3 4 5

39. Improved skills in using field trips and field experiences. 1 2 3 4 5

40. Improved skills in instructing poorly prepared students. 1 2 3 4 5

41. Improved skills in using the lecture technique. 1 2 3 4 5

42. Improved skills in writing objectives for programmes, courses and topics. 1 2 3 4 5

43. Improved skills in curriculum planning and development. 1 2 3 4 5

44. Improved skills in grouping students for instruction. 1 2 3 4 5

45. Improved skills in using the computer in university teaching. 1 2 3 4 5

46. Improved skills in preparing materials for programmed, multi-media approaches to teaching. 1 2 3 4 5

47. Improved skills in developing interpersonal relationships among students and staff. 1 2 3 4 5

48. Improved skills in making learning relevant for students. 1 2 3 4 5

49. Improved skills in using case studies, games and simulations in teaching. 1 2 3 4 5

50. Improved skills in using audio-visual equipment and materials in teaching and learning. 1 2 3 4 5

51. Improved skills in Bahasa Malaysia in teaching. 1 2 3 4 5

52. Improved skills in questioning techniques. 1 2 3 4 5

53. Improved skills in teaching reasoning and creative thinking. 1 2 3 4 5

54. Improved skills in conducting research in your field. 1 2 3 4 5

55. Improved basic knowledge within your area of specialization. 1 2 3 4 5

56. Improved diction and projection. 1 2 3 4 5

57. Improved methods for evaluating instruction for students. 1 2 3 4 5

Response key: 1=none or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

58. Developing an awareness of your responsibility towards colleagues and professional associations. 1 2 3 4 5

59. Developing a commitment to the goals of your university. 1 2 3 4 5

60. Developing a sensitivity for students' emotional and social needs. 1 2 3 4 5

61. Developing a sensitivity for students' cultural differences. 1 2 3 4 5

62. Developing strategies for evaluating instructional objectives. 1 2 3 4 5

63. Developing strategies which will enable students to participate in designing their learning experiences. 1 2 3 4 5

64. Other objectives of university instructional development (specify):

a. ....

.... 1 2 3 4 5

b. ....

.... 1 2 3 4 5

c. ....

.... 1 2 3 4 5

SECTION III

METHODS FOR INSTRUCTIONAL DEVELOPMENT PROGRAMMES

Description of Methods

Listed below are methods of communicating or acquiring the content knowledge and skills intended to assist staff members in their professional roles. Reading the following definitions will assist you in making responses on the next page.

A. **Lecture**. A one-way oral communication of content in which the receiver is passive.

B. **Demonstration**. Communication (of content or techniques) via words and/or visual materials, equipment and real objects.

C. **Group processes**. Task oriented; content is generated by members of the group, e.g. brainstorming.

D. **Private reading/study**. The acquisition of knowledge through reading professional journals, books and intra-university publications (circulars, handbooks) related to lecturer's role.

E. **Consultation**. A two-way verbal communication between a person who needs information and one who provides the needed information.

F. **Guided practice**. Guided practice involves developmental, first-hand experiences gained through working with a university lecturer or a teaching team.

Instruction

In SECTION II you responded to a list of selected objectives characteristic of university instructional development. The purpose of SECTION III is to match sixteen summarized objectives from the sixty-three objectives stated in SECTION II, with the most suitable methods for attaining the knowledge and/or skills stated by the summarized objectives.

From the given list of Instructional Improvement Methods select the single most appropriate method you consider to be suitable for approaching each summarized objective and enter the letter identifying it in COLUMN II.

Instructional Improvement Methods

A. Lecture
B. Demonstration
C. Group processes
D. Private reading/study
E. Consultation
F. Guided practice
G. Other (Specify) ______________________________

	COLUMN I Summarized Objectives	COLUMN II Single Most Appropriate Method
1.	Increased understanding of public service obligations.	______
2.	Increased understanding of university service obligations.	______
3.	Increased understanding of access to instructor supports.	______
4.	Increased understanding of access to student supports.	______
5.	Increased understanding of student psychology (individual).	______
6.	Increased understanding of student body (sociological).	______
7.	Increased understanding of instructor skills in dealing with students.	______
8.	Increased understanding of theories of learning.	______
9.	Increased understanding of communication skills.	______
10.	Increased understanding of specific teaching techniques.	______
11.	Increased understanding of ways of preparing curricula materials.	______
12.	Increased understanding of evaluation of student learning.	______
13.	Increased understanding of the use of audio-visual aids.	______
14.	Increased understanding of preparatory techniques.	______
15.	Increased understanding of evaluation of own performance.	______
16.	Increased understanding of latest developments, current trends and research findings in your area of specialization.	______

SECTION IV

STRATEGIES AND ORGANIZATIONAL ARRANGEMENTS FOR IMPLEMENTING INSTRUCTIONAL DEVELOPMENT PROGRAMMES

Instructions

In this section, you are asked to indicate your perceptions of **actual practices** and **preferred practices** relating to the manner in which university-organized or university-supported instructional development programmes/activities are implemented. Circle the appropriate number on the response scale.

Response key: 1=none, or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

1. To what extent does your university make the following provisions in order to encourage participation in instructional development activities? What is your preference for provisions?

a.	Special recognition of staff for excellence in teaching	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
b.	Circulation of newsletter, articles, etc. that are pertinent to teaching improvement or staff development	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
c.	Periods of time during the university year set aside for professional development	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
d.	Periodic reviews of the performance of all staff members.	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
e.	Sabbatical leaves with salary	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
f.	Unpaid leaves for educational or developmental purposes.	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
g.	Reduced teaching load for first year staff	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
h.	Temporary teaching load reductions to work on a new course, major course revision, or research area	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
i.	Travel grants to refresh or update knowledge in a particular field	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
j.	Travel funds available to attend professional conferences	Actual 1 2 3 4 5 Preferred 1 2 3 4 5

S

Response key: 1=none, or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

k.	Visiting scholars programme that brings people to the campus for short or long periods	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
l.	Campus committees on staff development	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
m.	Other (specify):	
	1)	Actual 1 2 3 4 5
	....	Preferred 1 2 3 4 5
	2)	Actual 1 2 3 4 5
	....	Preferred 1 2 3 4 5

2. To what extent are instructional development activities held at each of the following times? What is your preference for time?

a.	During university term	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
b.	During the long vacation	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
c.	Other (specify):	
	1)	Actual 1 2 3 4 5
	....	Preferred 1 2 3 4 5
	2)	Actual 1 2 3 4 5
	....	Preferred 1 2 3 4 5

3. To what extent is use made of the following sources of expertise for instructional development activities? What is your preference for sources of expertise?

a.	The university's own academic staff	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
b.	Specialist consultants from outside the university	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
c.	Deans of faculties	Actual 1 2 3 4 5 Preferred 1 2 3 4 5
d.	Heads of Departments/Divisions, Directors of Centres	Actual 1 2 3 4 5 Preferred 1 2 3 4 5

Response key: 1=none, or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

e. Other (specify):

1) .... Actual 1 2 3 4 5

.... Preferred 1 2 3 4 5

2) .... Actual 1 2 3 4 5

.... Preferred 1 2 3 4 5

4. To what extent is each of the following organizational arrangements used for implementing instructional development activities? What is your preference for arrangements?

a. Workshops (small gathering, structured activities — Actual 1 2 3 4 5 / Preferred 1 2 3 4 5

b. Field experience (temporary placement in a related organization.) — Actual 1 2 3 4 5 / Preferred 1 2 3 4 5

c. Conference (large gathering, structured activities.) — Actual 1 2 3 4 5 / Preferred 1 2 3 4 5

d. Internship (first-hand experience under guidance.) — Actual 1 2 3 4 5 / Preferred 1 2 3 4 5

e. Interview (close interpersonal interaction designed to improve understanding.) — Actual 1 2 3 4 5 / Preferred 1 2 3 4 5

f. Other (specify):

1) .... Actual 1 2 3 4 5

.... Preferred 1 2 3 4 5

2) .... Actual 1 2 3 4 5

.... Preferred 1 2 3 4 5

5. To what extent does each of the following influence your awareness of instructional development needs. What is your preference for sources?

a. Students. — Actual 1 2 3 4 5 / Preferred 1 2 3 4 5

b. Administrators. — Actual 1 2 3 4 5 / Preferred 1 2 3 4 5

c. Lecturers (i.e. academic staff) — Actual 1 2 3 4 5 / Preferred 1 2 3 4 5

Response key: 1=none, or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

d. Academic staff committee. Actual 1 2 3 4 5
Preferred 1 2 3 4 5

e. Other (specify):

1) .... Actual 1 2 3 4 5

.... Preferred 1 2 3 4 5

2) .... Actual 1 2 3 4 5

6. To what extent is the importance of instructional development activities recognized by the university? What is your preference for recognition?
Actual 1 2 3 4 5
Preferred 1 2 3 4 5

SECTION IV-B

Response key: 1=none, or very limited extent, 2=limited extent, 3=moderate extent, 4=large extent, 5=very large extent

1. To what extent should the following assume a leadership role in the implementation of instructional development programmes and activities in your university?

a. Vice-Chancellor 1 2 3 4 5

b. Deputy Vice-Chancellor (Admin. & Estab.) 1 2 3 4 5

c. Deputy Vice-Chancellor (Devel., Res., & Finance) 1 2 3 4 5

d. Deputy Vice-Chancellor (Student Affairs) 1 2 3 4 5

e. Deans of Faculties 1 2 3 4 5

f. Heads of Departments/Divisions 1 2 3 4 5

g. Directors of Centres 1 2 3 4 5

h. A standing committee 1 2 3 4 5

i. Academic Staff Association (ASA) 1 2 3 4 5

j. The individual instructor 1 2 3 4 5

k. Other (specify):

1) 1 2 3 4 5

2) 1 2 3 4 5

SECTION V

1. Describe the most significant inservice, orientation, or professional development activity in which you participated within the last two years; state in what ways it was helpful to you.

2. Describe any recurring problems, related to your teaching, for which you see the need for more information, or further skill development.

3. Indicate your own plans (if any) for further professional development.

Thank you for your cooperation in completing this questionnaire. WOULD YOU PLEASE SEND IT IN CAMPUS MAIL IN THE ENCLOSED ENVELOPE BY OCTOBER 20TH, 1982.

INTERVIEW GUIDE

Introduction

The objective of this interview will be to facilitate the acquisition of information concerning an historical and political treatment of staff development at the University of Malaya. For the purpose of this study, "instructional development" focusses on the staff member's role as a teacher. There are four aspects of this role which are relevant to competent performance:

1. knowledge of the discipline.
2. knowledge and skills in instructional methodology.
3. knowledge of students and
4. knowledge of contextual factors (i.e., institutional, political, socio-economic and demographic).

INTERVIEW SCHEDULE

INTERVIEWER ....

DATE ....

LOCATION ....

CODE/NUMBER ....

QUESTIONS	RESPONSES	INTERVIEWER'S COMMENTS	CODING
1. BIOGRAPHICAL DATA A. Name B. Position C. Faculty D. Special responsibility (if any) for instructional development	 A. B. C. D.		
I. HISTORICAL TREATMENT 1. When did formal staff development(SD) programming begin at the University of Malaya?			
2. What specific SD programmes have been carried out to date?			

QUESTIONS	RESPONSES	INTERVIEWER'S COMMENTS	CODING
3. What precise activities did the programmes involve?			
4. What criteria were applied in determining participants for the programmes?			
5. What criteria were applied in determining locations for SD programmes?			
6. What percent of the annual budget of the university is allocated for SD programmes?			
7. What administrative structures are in place specifically for SD?			

QUESTIONS	RESPONSES	INTERVIEWER'S COMMENTS	CODING
8. What documents (reports, policies, etc) are available to guide SD?			
II. POLITICAL TREATMENT 9. In your opinion, what are the major issues relating to SD in this university?			
10. In your opinion,what are the major obstacles to SD?			
11. Can you suggest ways and means of overcoming these obstacles? THANK YOU FOR YOUR TIME AND INTEREST			

APPENDIX B

TABLES

Table 35

Mean Scores and Rank Order of Perceived Need for Instructional Development Objectives by the Total Sample (N=169)

Item No	Objective	MS	SD	Rank	*Type of Obj
1.	Increased understanding of the philosophy of university education	3.92	0.92	5	CF
2.	Increased understanding of conditions of employment	3.12	0.96	52	CF
3.	Increased understanding of the role of guidance and counselling services in your university	3.40	1.00	33	CF
4.	Increased understanding of political and socio-economic factors influencing your university	3.16	1.11	50	CF
5.	Increased understanding of the operations and functions of your university's/faculty's educational media centre (includes library)	3.50	0.91	26	CF
6.	Increased understanding of the functions of administration in your university	3.32	1.01	39.5	CF
7.	Increased understanding of the community service and human resources available to your university	3.27	1.03	45.5	CF
8.	Increased understanding of your expected involvement in university extracurricular activities	3.06	0.96	53	CF

Item No	Objective	MS	SD	Rank	*Type of Obj
9.	Increased understanding of the implications of accountability for the university lecturer's role	3.44	0.97	30	CF
10.	Increased understanding of the Malaysian society	2.82	1.16	60	CF
11.	Increased understanding of the career opportunities available to graduates of your university	2.99	0.99	55	CF
12.	Increased understanding of the structure and working of the government of Malaysia	2.83	0.88	59	CF
13.	Increased understanding of student behavior	3.58	0.84	22	SN
14.	Increased understanding of the general psychology of the adult student	3.81	0.86	9.5	SN
15.	Increased understanding of the motivation of the adult student	3.73	0.88	13	SN
16.	Increased understanding of the "youth culture"	2.85	0.88	58	SN
17.	Increased understanding of the methods to diagnose students' educational needs	3.65	0.86	16	SN
18.	Increased understanding of the structure and fuctions of the university student body	2.49	1.02	63	SN
19.	Increased understanding of students' inadequacies	3.41	0.99	31	SN
20.	Increased understanding of students' aspirations	2.94	1.12	57	SN

Item No	Objective	MS	SD	Rank	*Type of Obj
21.	Increased understanding of instructor's role in student-initiated activities	3.40	0.81	33	SN
22.	Increased openness to students' viewpoints	3.35	0.97	35	SN
23.	Increased understanding of instructor's responsibility in helping students outside regular classes	3.27	0.94	45.5	SN
24.	Increased understanding of the basic methods of teaching and learning	4.12	0.89	3	IM
25.	Increased understanding of the methods of using self-evaluation of teaching performance	4.17	0.83	2	IM
26.	Increased understanding of ways of reinforcing learning	3.72	0.93	14	IM
27.	Increased understanding of methods of constructing instruments for evaluating students' progress	3.60	0.89	20	IM
28.	Increased understanding of ways to prepare independent study materials	3.83	0.96	7.5	IM
29.	Increased understanding of theories of teaching and learning in adult education	3.95	1.01	4	IM
30.	Increased understanding of the uses of group dynamics	3.34	0.95	37	IM
31.	Increased understanding of students' socio-economic status	2.79	0.96	61	SN

Item No	Objective	MS	SD	Rank	*Type of Obj
32.	Increased understanding of discussion techniques in teaching	3.87	0.93	6	IM
33.	Increased understanding of educational innovations in universities	3.81	0.85	9.5	IM
34.	Increased understanding of the philosophy of your discipline	3.61	0.98	18	CE
35.	Increased understanding of fields related to your own teaching specialization	3.60	0.95	20	CE
36.	Increased knowledge of your professional association(s)	3.23	0.98	49	CE
37.	Increased practical expertise in your area of specialization	3.46	0.95	29	CE
38.	Increased knowledge of current trends and research in your area of specialization	3.75	0.92	12	CE
39.	Improved skills in using field trips and field experiences	3.28	1.00	43.5	IM
40.	Improved skills in instructing poorly prepared students	3.66	0.87	15	IM
41.	Improved skills in using the lecture technique	3.31	0.98	41	IM
42.	Improved skills in writing objectives for programmes, courses and topics	3.34	0.83	37	IM
43.	Improved skills in curriculum planning and development	3.62	0.82	17	IM

Item No	Objective	MS	SD	Rank	*Type of Obj
44.	Improved skills in grouping students for instruction	3.05	0.87	54	IM
45.	Improved skills in using the computer in university teaching	3.57	0.92	23	IM
46.	Improved skills in preparing materials for programmed, multi-media approaches to teaching	3.60	0.92	20	IM
47.	Improved skills in developing interpersonal relationships among students and staff	3.32	0.89	39.5	IM
48.	Improved skills in making learning relevant for students	3.55	0.96	24	IM
49.	Improved skills in using case studies, games and simulation in teaching	3.50	0.98	26	IM
50.	Improved skills in using audio-visual equipment and materials in teaching and learning	3.79	0.91	11	IM
51.	Improved skills in Bahasa Malaysia in teaching	4.20	0.92	1	IM
52.	Improved skills in questioning techniques	3.40	0.80	33	IM
53.	Improved skills in teaching reasoning and creative thinking	3.83	0.84	7.5	IM
54.	Improved skills in conducting research in your field	3.50	0.89	26	CE
55.	Improved basic knowledge within your area of specialization	3.28	1.04	43.5	CE

Item No	Objective	MS	SD	Rank	*Type of Obj
56.	Improved diction and projection	3.13	0.84	51	IM
57.	Improved methods for evaluating instruction for students	3.47	0.82	28	IM
58.	Developing an awareness of your responsibility towards colleagues and professional associations	3.25	0.89	47.5	CF
59.	Developing a commitment to the goals of your university	3.25	0.83	47.5	CF
60.	Developing a sensitivity for students' emotional and social needs	2.96	0.98	56	SN
61.	Developing a sensitivity for students' cultural differences	2.76	1.07	62	SN
62.	Developing strategies for evaluating instructional objectives	3.30	0.87	42	IM
63.	Developing strategies which will enable students to participate in designing their learning experiences	3.34	0.96	37	IM
	Overall Mean Score	**3.42**	**0.48**		

*Type of Objective
IM: Instructional methodology
CF: Contextual factors
SN: Student needs
CE: Content expertise

Table 36

Mean Scores of Perceived Need for Instructional Development Objectives by Each Participating Faculty /Centre (N=169)

Item No	Objective	Type of Obj	Gr1* (N=24)		Gr2* (N=6)		Gr3* (N=19)		Gr4* (N=14)		Gr5* (N=10)		Gr6* (N=6)		Gr7* (N=36)		Gr8* (N=33)		Gr9* (N=21)		F	P	Scheffe (p≤.1)
			MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD			
1	Increased understanding of the philosophy of university education	CF	3.75	0.79	4.00	1.10	4.11	0.81	4.07	0.83	3.70	0.92	3.83	0.75	4.08	0.97	4.18	0.85	3.48	1.03	2.22	0.03	
2	Increased understanding of conditions of employment	CF	3.46	0.88	2.83	0.41	2.95	0.78	3.21	1.19	2.50	0.85	3.17	0.75	3.39	0.77	2.85	1.12	3.14	1.11	1.80	0.08	
3.	Increased understanding of the role of guidance and counselling services in your university	CF	3.63	0.71	2.83	0.98	3.58	1.07	4.00	1.18	2.50	0.97	3.50	0.84	3.33	0.79	3.42	0.94	3.19	1.25	2.43	0.02	4-5
4	Increased understanding of political and socio-economic factors influencing your university	CF	3.29	1.04	2.50	0.55	3.16	0.96	3.86	0.95	2.70	1.25	3.33	0.52	3.44	1.05	2.88	1.24	2.86	1.20	2.09	0.04	
5.	Increased understanding of the operations and functions of your university's/faculty's educational media centre (includes library)	CF	3.54	0.88	3.17	1.47	3.26	0.87	3.86	0.95	3.10	0.86	3.50	0.84	3.78	0.80	3.33	1.07	3.48	0.75	1.35	0.22	
6.	Increased understanding of the functions of administration in your university	CF	3.58	0.78	2.67	0.82	3.05	0.71	3.79	0.80	2.70	0.67	3.33	0.52	3.97	0.88	2.85	1.15	3.05	1.12	5.47	0.00	5-7, 7-8
7	Increased understanding of the community service and human resources available to your university	CF	3.08	0.83	3.00	1.10	2.95	0.91	4.00	0.96	2.30	0.82	3.00	1.10	3.72	0.94	3.30	0.81	3.05	1.32	3.92	0.00	4-5 5-6
8	Increased understanding of your expected involvement in university extracurricular activities	CF	2.92	0.97	2.33	0.82	2.79	0.63	3.50	1.02	2.40	1.08	3.17	0.98	3.53	0.70	3.06	1.09	2.86	0.91	3.16	0.00	

Item No	Objective	Type of Obj	Gr1* (N=24)		Gr2* (N=6)		Gr3* (N=19)		Gr4* (N=14)		Gr5* (N=10)		Gr6* (N=6)		Gr7* (N=36)		Gr8* (N=33)		Gr9* (N=21)		Overall		Scheffé (p≤.1)
			MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	F	P	
9.	Increased understanding of the implications of accountability for the university lecturer's role	CF	3.38	0.88	2.83	1.17	3.21	0.98	4.07	1.00	2.80	1.03	3.33	0.52	3.75	0.77	3.36	1.03	3.38	1.02	2.38	0.02	
10.	Increased understanding of the Malaysian society	CF	3.00	1.10	2.50	0.84	2.89	0.99	3.50	1.22	2.70	0.67	3.00	0.89	2.75	1.18	2.39	1.22	3.00	1.38	1.43	0.19	
11.	Increased understanding of the career opportunities available to graduates of your university	CF	2.83	1.09	2.67	0.82	3.11	0.90	3.36	0.74	2.30	0.82	2.83	0.75	2.94	0.89	3.09	1.07	3.24	1.18	1.30	0.25	
12.	Increased understanding of the structure and working of the government of Malaysia	CF	3.13	0.90	2.33	0.82	2.95	0.71	3.07	1.00	2.60	0.52	3.00	0.63	2.94	0.83	2.48	1.00	2.81	0.93	1.61	0.13	
13.	Increased understanding of student behavior	SN	3.71	0.81	3.33	0.82	3.63	0.76	3.79	0.89	3.40	0.52	3.83	0.41	3.31	0.89	3.67	0.99	3.67	0.73	0.93	0.49	
14.	Increased understanding of the general psychology of the adult student	SN	3.54	1.10	3.33	0.52	4.00	0.82	4.00	0.68	3.90	0.57	4.17	0.75	3.81	0.82	3.85	1.00	3.71	0.72	0.90	0.52	
15.	Increased understanding of the motivation of the adult student	SN	3.67	0.96	3.33	0.82	3.84	0.76	3.93	0.73	3.80	0.42	4.33	0.52	3.61	0.99	3.64	1.08	3.81	0.60	0.80	0.60	
16.	Increased understanding of the "youth culture"	SN	2.88	0.85	2.83	0.41	2.95	0.62	3.64	0.93	2.60	0.52	2.83	0.75	2.44	0.77	2.67	0.99	3.33	0.86	4.00	0.00	4-7,7-9, 4-8
17.	Increased understanding of the methods to diagnose students' educational needs	SN	3.58	0.78	3.00	0.63	3.89	0.88	4.29	0.83	3.40	0.84	3.50	0.55	3.47	0.86	3.70	0.88	3.67	0.86	2.02	0.05	
18.	Increased understanding of the structure and fuctions of the university student body	SN	2.58	0.88	2.33	1.21	2.68	1.00	3.07	0.73	1.70	0.82	2.33	0.82	2.44	0.91	2.33	0.99	2.57	1.43	1.64	0.12	
19.	Increased understanding of students' inadequacies	SN	3.46	0.83	2.83	0.98	3.32	0.82	4.07	0.73	2.40	1.17	2.83	1.47	3.33	0.76	3.58	1.12	3.71	0.96	3.34	0.00	4-5

Item No	Objective	Type of Obj	Gr1• (N=24)		Gr2• (N=6)		Gr3• (N=19)		Gr4• (N=14)		Gr5• (N=10)		Gr6• (N=6)		Gr7• (N=36)		Gr8• (N=33)		Gr9• (N=21)		Overall		Scheffé (P≤.1)
			MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	F	P	
20.	Increased understanding of students' aspirations	SN	2.79	1.02	2.33	1.21	3.11	0.99	3.71	0.83	2.30	1.06	2.17	0.98	2.86	1.02	2.97	1.19	3.19	1.36	2.18	0.03	
21.	Increased understanding of instructor's role in student-initiated activities	SN	2.92	0.78	3.00	1.10	3.63	0.60	3.50	0.85	3.50	0.71	3.33	1.03	3.44	0.81	3.52	0.83	3.48	0.81	1.63	0.12	
22.	Increased openness to students' viewpoints	SN	3.29	0.86	3.00	0.89	3.22	0.65	3.86	0.95	3.00	1.15	3.17	1.47	3.19	0.92	3.58	1.06	3.38	1.02	1.16	0.33	
23.	Increased understanding of instructor's responsibility in helping students outside regular classes	SN	3.21	0.72	2.67	0.82	3.26	0.73	3.64	1.08	3.30	0.95	3.50	1.22	3.17	0.97	3.52	1.09	2.95	0.80	1.29	0.25	
24.	Increased understanding of the basic methods of teaching and learning	IM	3.79	1.10	3.67	1.03	4.37	0.76	4.43	0.76	4.40	0.70	4.17	0.75	4.03	0.91	4.18	0.81	4.14	0.96	1.19	0.31	
25.	Increased understanding of the methods of using self-evaluation of teaching performance	IM	3.96	0.95	3.67	0.52	4.32	0.67	4.36	0.74	4.00	0.67	4.50	0.55	4.31	0.86	4.18	0.95	4.00	0.77	1.04	0.41	
26.	Increased understanding of ways of reinforcing learning	IM	3.58	0.88	3.17	0.75	3.89	0.88	4.21	0.89	3.20	0.79	3.50	0.55	3.81	1.01	3.64	1.03	3.86	0.85	1.50	0.16	
27.	Increased understanding of methods of constructing instruments for evaluating students' progress	IM	3.38	1.01	3.33	0.82	4.32	0.82	4.36	0.63	3.40	1.08	3.83	0.41	3.36	0.72	3.24	0.71	3.81	0.87	5.20	0.00	3-8,3-7, 3-1,4-8, 9-7
28.	Increased understanding of ways to prepare independent study materials	IM	3.79	1.22	3.33	0.82	4.52	0.70	4.36	0.74	3.40	1.08	4.00	0.63	3.72	0.81	3.45	0.94	4.00	0.89	3.35	0.00	3-8
29.	Increased understanding of theories of teaching and learning in adult education	IM	3.79	1.22	3.50	1.05	4.37	0.68	4.14	0.86	3.60	1.08	4.67	0.52	4.08	0.84	3.55	1.20	4.14	0.85	2.17	0.03	

Item No	Objective	Type of Obj	Gr1* (N=24) MS	Gr1* (N=24) SD	Gr2* (N=6) MS	Gr2* (N=6) SD	Gr3* (N=19) MS	Gr3* (N=19) SD	Gr4* (N=14) MS	Gr4* (N=14) SD	Gr5* (N=10) MS	Gr5* (N=10) SD	Gr6* (N=6) MS	Gr6* (N=6) SD	Gr7* (N=36) MS	Gr7* (N=36) SD	Gr8* (N=33) MS	Gr8* (N=33) SD	Gr9* (N=21) MS	Gr9* (N=21) SD	Overall F	Overall P	Scheffé (p≤.1)
30.	Increased understanding of the uses of group dynamics	IM	3.00	1.02	2.83	0.75	3.79	0.71	4.07	0.92	2.90	0.57	3.50	0.84	3.28	0.97	3.18	0.98	3.48	0.87	2.88	0.01	
31.	Increased understanding of students' socio-economic status	SN	2.79	0.83	2.33	0.82	2.84	0.60	3.07	0.47	2.30	1.06	3.17	1.17	2.78	0.99	2.64	1.17	3.10	1.04	1.16	0.33	
32.	Increased understanding of discussion techniques in teaching	IM	3.83	0.82	3.17	1.17	4.05	0.78	4.00	0.78	3.70	0.82	4.00	0.63	4.08	0.97	3.70	1.13	3.81	0.87	1.01	0.43	
33.	Increased understanding of educational innovations in universities	IM	3.79	0.83	3.17	0.75	4.16	0.76	3.93	0.73	3.80	0.79	4.17	0.75	3.78	0.93	3.70	0.95	3.71	0.78	1.10	0.36	
34.	Increased understanding of the philosophy of your discipline	CE	3.79	0.78	3.00	0.89	4.00	1.20	3.71	0.99	3.50	0.85	3.83	0.75	3.69	0.86	3.39	1.14	3.33	0.91	1.32	0.24	
35.	Increased understanding of fields related to your own teaching specialization	CE	3.71	0.86	3.00	0.63	4.00	1.05	3.57	1.09	3.20	1.03	3.67	0.82	3.64	0.76	3.55	0.97	3.57	1.12	1.02	0.42	
36.	Increased knowledge of your professional association(s)	CE	3.25	0.90	2.83	0.41	3.58	1.30	3.36	0.63	2.90	0.74	3.50	0.84	3.08	0.97	3.21	0.99	3.29	1.15	0.76	0.64	
37.	Increased practical expertise in your area of specialization	CE	3.54	0.83	3.33	0.82	3.95	0.97	3.93	0.73	3.30	0.95	4.00	0.63	3.11	0.98	3.24	0.90	3.52	1.03	2.37	0.02	
38.	Increased knowledge of current trends and research in your area of specialization	CE	3.79	0.66	3.17	0.98	4.11	0.88	4.36	0.74	4.00	1.05	3.50	0.55	3.22	1.05	3.67	0.89	4.10	0.62	3.94	0.00	4-7
39.	Improved skills in using field trips and field experiences	IM	3.79	0.93	2.33	1.03	3.74	0.73	3.43	0.94	3.80	1.03	3.50	0.55	2.92	1.08	3.24	0.90	2.86	0.91	3.90	0.00	
40.	Improved skills in instructing poorly prepared students	IM	3.67	0.87	2.83	0.98	3.37	0.90	4.21	0.70	3.40	1.08	3.83	0.75	3.47	0.74	3.94	0.90	3.76	0.70	2.70	0.01	

Item No	Objective	Type of Obj	Gr1* (N=24)		Gr2* (N=6)		Gr3* (N=19)		Gr4* (N=14)		Gr5* (N=10)		Gr6* (N=6)		Gr7* (N=36)		Gr8* (N=33)		Gr9* (N=21)		Overall		Scheffé (p≤.1)
			MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	F	P	
41.	Improved skills in using the lecture technique	IM	3.04	0.75	2.83	0.75	4.00	0.67	4.21	0.89	3.10	0.57	3.67	0.82	2.75	0.94	3.36	1.06	3.38	0.97	5.77	0.00	3-7,4-7, 4-1
42.	Improved skills in writing objectives for programmes, courses and topics	IM	3.17	0.87	2.67	0.52	3.58	0.69	3.79	0.98	3.00	0.47	3.33	0.52	3.31	0.86	3.30	0.88	3.52	0.81	1.73	0.09	
43.	Improved skills in curriculum planning and development	IM	3.63	0.77	3.33	0.82	3.63	0.83	3.79	0.70	3.10	0.57	3.17	0.41	3.75	0.77	3.64	0.99	3.67	0.86	1.03	0.42	
44.	Improved skills in grouping students for instruction	IM	3.08	0.93	2.67	0.52	2.89	0.74	3.50	0.65	2.50	0.53	2.83	0.41	2.92	0.69	3.12	1.19	3.38	0.80	1.85	0.07	
45.	Improved skills in using the computer in university teaching	IM	3.38	1.06	3.33	0.82	3.63	0.68	3.79	0.98	3.70	0.82	3.50	0.84	3.58	0.81	3.70	0.95	3.43	1.17	0.45	0.89	
46.	Improved skills in preparing materials for programmed, multi-media approaches to teaching	IM	3.38	0.97	3.50	0.55	3.95	0.71	4.29	0.73	3.70	0.48	3.67	1.03	3.58	0.84	3.27	1.04	3.62	1.07	2.15	0.03	
47.	Improved skills in developing interpersonal relationships among students and staff	IM	3.04	0.62	2.83	0.75	3.42	0.90	3.93	0.73	2.70	0.82	3.17	0.75	3.56	0.88	3.27	0.98	3.29	0.96	2.50	0.14	
48.	Improved skills in making learning relevant for students	IM	3.54	0.88	3.17	0.75	3.68	0.89	4.14	0.86	3.30	0.48	2.83	0.75	3.56	0.94	3.42	1.20	3.67	0.91	1.49	0.16	
49.	Improved skills in using case studies, games and simulation in teaching	IM	3.63	1.10	3.33	0.82	3.89	0.74	4.00	0.68	3.30	0.95	3.83	1.17	3.47	0.84	3.09	1.18	3.38	0.86	1.90	0.06	
50.	Improved skills in using audio-visual equipment and materials in teaching and learning	IM	3.88	1.12	3.50	1.05	4.05	0.85	4.07	0.92	3.60	0.97	4.17	0.41	3.81	0.75	3.64	0.99	3.57	0.87	0.91	0.51	
51.	Improved skills in Bahasa Malaysia in teaching	IM	3.96	1.23	3.50	0.84	4.53	0.77	4.36	0.74	4.60	0.70	3.83	0.98	4.14	0.96	4.18	0.85	4.33	0.73	1.47	0.17	

Item No	Objective	Type of Obj	Gr1* (N=24)		Gr2* (N=6)		Gr3* (N=19)		Gr4* (N=14)		Gr5* (N=10)		Gr6* (N=6)		Gr7* (N=36)		Gr8* (N=33)		Gr9* (N=21)		Overall		Scheffé (p≤.1)
			MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	F	P	
52.	Improved skills in questioning techniques	IM	3.29	0.86	3.00	0.63	3.47	0.61	4.00	0.68	2.90	0.32	3.50	0.55	3.22	0.87	3.33	0.85	3.81	0.68	2.96	0.00	
53.	Improved skills in teaching-reasoning and creative thinking	IM	3.71	0.69	3.00	0.63	3.89	0.66	4.21	0.80	3.50	0.53	4.00	0.63	3.47	0.81	4.12	0.99	4.19	0.81	3.56	0.00	
54.	Improved skills in conducting research in your field	CE	3.38	0.58	3.50	0.55	3.84	0.96	4.00	0.96	3.30	0.95	3.17	0.75	3.22	0.93	3.45	0.90	3.71	0.96	1.78	0.08	
55.	Improved basic knowledge within your area of specialization	CE	3.17	0.87	3.00	0.89	3.95	0.97	3.86	0.66	3.40	0.84	2.83	0.98	2.89	1.09	3.09	1.07	3.57	1.08	3.03	0.00	3-7
56.	Improved diction and projection	IM	2.96	0.55	2.83	0.41	3.32	0.89	3.71	0.91	3.40	0.70	3.00	0.0	2.72	0.70	3.42	1.00	3.00	0.84	3.33	0.00	4-7
57.	Improved methods for evaluating instruction for students	IM	3.17	0.76	3.17	0.41	3.58	0.61	4.14	0.86	3.10	0.57	3.50	0.55	3.50	0.70	3.48	1.12	3.48	0.75	2.08	0.04	
58.	Developing an awareness of your responsibility towards colleagues and professional associations	CF	3.08	0.93	2.67	0.52	3.53	0.90	3.14	0.77	3.00	0.0	3.50	0.84	3.50	0.61	3.30	1.19	3.00	0.95	1.46	0.18	
59.	Developing a commitment to the goals of your university	CF	3.13	0.80	3.00	0.63	3.21	0.71	3.64	0.84	2.80	0.42	3.67	1.21	3.44	0.69	3.03	0.95	3.33	0.91	1.71	0.10	
60.	Developing a sensitivity for students' emotional and social needs	SN	2.83	0.70	2.67	0.52	3.00	0.88	4.00	0.68	2.40	0.70	2.83	1.47	3.00	0.86	2.67	1.22	3.14	0.91	3.32	0.00	4-5, 4-8, 4-1
61.	Developing a sensitivity for students' cultural differences	SN	2.79	0.78	2.50	1.05	2.68	0.95	3.71	1.14	2.30	1.06	2.83	0.98	2.58	0.97	2.48	1.15	3.14	1.15	2.62	0.01	4-8
62.	Developing strategies for evaluating instructional objectives	IM	3.04	0.86	3.00	0.63	3.47	0.51	3.79	1.05	3.10	0.74	3.67	0.82	3.14	0.72	3.24	1.03	3.57	0.93	1.70	0.10	

Item No	Objective	Type of Obj	Gr1* (N=24) MS	SD	Gr2* (N=8) MS	SD	Gr3* (N=19) MS	SD	Gr4* (N=14) MS	SD	Gr5* (N=10) MS	SD	Gr6* (N=6) MS	SD	Gr7* (N=36) MS	SD	Gr8* (N=33) MS	SD	Gr9* (N=21) MS	SD	Overall F	P	Scheffé (p≤.1)
63.	Developing strategies which will enable students to participate in designing their learning experiences	IM	3.04	1.04	2.83	0.41	3.63	0.68	3.79	0.57	3.00	0.0	3.83	0.98	3.36	0.93	3.24	1.25	3.43	1.03	1.54	0.15	
	Overall		3.42	0.45	2.88	0.47	3.58	0.37	3.86	0.36	3.12	0.28	3.47	0.33	3.39	0.38	3.35	0.56	3.48	0.54	3.39	0.00	

Faculty*/Centre*

Gr1: Arts & Soc.Sc.	Gr6: Law
Gr2: Dentistry	Gr7: Medicine
Gr3: Econ. & Pub.Admin.	Gr8: Science
Gr4: Education	Gr9: Centre for Foundation Studies in Sc. & Lang. Centre
Gr5: Engineering	

Table 37

Mean Scores and Rank Order of Perceived Need
for Instructional Development Objectives
by Administrators and Instructors
(N=169)

Item No	Objective	Administrators N=34 MS	SD	Rank	Instructors N=135 MS	SD	Rank
1.	Increased understanding of the philosophy of university education	3.94	0.85	6	3.91	0.94	6
2.	Increased understanding of conditions of employment	3.18	0.80	48.5	3.10	1.00	51
3.	Increased understanding of the role of guidance and counselling services in your university	3.59	0.86	23	3.35	1.02	34
4.	Increased understanding of political and socio-economic factors influencing your university	3.47	0.93	35	3.08	1.14	52
5.	Increased understanding of the operations and functions of your university's/faculty's educational media centre (includes library)	3.41	1.05	39.5	3.52	0.88	25
6.	Increased understanding of the functions of administration in your university	3.47	0.90	35	3.28	1.03	42
7.	Increased understanding of the community service and human resources available to your university	3.21	1.01	47	3.28	1.03	42

Item No	Objective	Administrators N=34 MS	SD	Rank	Instructors N=135 MS	SD	Rank
8.	Increased understanding of your expected involvement in university extracurricular activities	3.00	0.89	59.5	3.07	0.98	53
9.	Increased understanding of the implications of accountability for the university lecturer's role	3.74	0.86	11.5	3.36	0.98	33
10.	Increased understanding of the Malaysian society	3.12	1.15	52.5	2.75	1.16	60.5
11.	Increased understanding of the career opportunities available to graduates of your university	3.21	0.99	46	2.94	0.98	55
12.	Increased understanding of the structure and working of the government of Malaysia	3.06	0.89	56.5	2.78	0.88	59
13.	Increased understanding of student behavior	3.53	0.86	28	3.59	0.83	20
14.	Increased understanding of the general psychology of the adult student	3.65	0.77	17	3.84	0.88	7
15.	Increased understanding of the motivation of the adult student	3.59	0.82	23	3.76	0.89	13.5
16.	Increased understanding of the "youth culture"	2.91	0.75	62	2.84	0.91	58
17.	Increased understanding of the methods to diagnose students' educational needs	3.94	0.89	6	3.58	0.84	21
18.	Increased understanding of the structure and fuctions of the university student body	2.53	0.99	63	2.47	1.03	63

Item No	Objective	Administrators N=34			Instructors N=135		
		MS	SD	Rank	MS	SD	Rank
19.	Increased understanding of students' inadequacies	3.53	1.11	28	3.39	0.96	30
20.	Increased understanding of students' aspirations	3.06	1.23	56.5	2.90	1.09	56
21.	Increased understanding of instructor's role in student-initiated activities	3.47	0.86	35	3.38	0.81	31.5
22.	Increased openness to students' viewpoints	3.52	1.03	30	3.30	0.96	39.5
23.	Increased understanding of instructor's responsibility in helping students outside regular classes	3.59	0.86	23	3.19	0.95	49
24.	Increased understanding of the basic methods of teaching and learning	4.15	0.82	2	4.12	0.92	3
25.	Increased understanding of the methods of using self-evaluation of teaching performance	4.18	0.80	1	4.16	0.84	2
26.	Increased understanding of ways of reinforcing learning	3.59	0.96	23	3.76	0.93	13.5
27.	Increased understanding of methods of constructing instruments for evaluating students' progress	3.62	0.92	19	3.60	0.88	19
28.	Increased understanding of ways to prepare independent study materials	3.94	1.10	6	3.81	0.93	11.5
29.	Increased understanding of theories of teaching and learning in adult education	4.00	0.95	4	3.94	1.03	4

Item No	Objective	Administrators N=34 MS	SD	Rank	Instructors N=135 MS	SD	Rank
30.	Increased understanding of the uses of group dynamics	3.50	0.99	31.5	3.30	0.94	39.5
31.	Increased understanding of students' socio-economic status	2.97	0.97	61	2.75	0.95	60.5
32.	Increased understanding of discussion techniques in teaching	3.68	1.12	15	3.92	0.87	5
33.	Increased understanding of educational innovations in universities	3.74	0.90	11.5	3.82	0.85	9
34.	Increased understanding of the philosophy of your discipline	3.59	0.93	23	3.61	0.99	18
35.	Increased understanding of fields related to your own own teaching specialization	3.29	1.00	42.5	3.69	0.92	15
36.	Increased knowledge of your professional association(s)	3.12	1.01	52.5	3.26	0.97	45
37.	Increased practical expertise in your area of specialization	3.15	1.05	50.5	3.54	0.90	22
38.	Increased knowledge of current trends and research in your area of specialization	3.41	0.93	39.5	3.83	0.90	8
39.	Improved skills in using field trips and field experiences	3.15	1.08	50.5	3.32	0.98	38
40.	Improved skills in instructing poorly prepared students	3.65	0.92	17	3.67	0.86	16

Item No	Objective	Administrators N=34 MS	Administrators N=34 SD	Administrators N=34 Rank	Instructors N=135 MS	Instructors N=135 SD	Instructors N=135 Rank
41.	Improved skills in using the lecture technique	3.21	1.04	46	3.33	0.97	36.5
42.	Improved skills in writing objectives for programmes, courses and topics	3.35	0.73	41	3.34	0.86	35
43.	Improved skills in curriculum planning and development	3.59	0.82	23	3.62	0.82	17
44.	Improved skills in grouping students for instruction	3.00	0.82	59.5	3.06	0.88	54
45.	Improved skills in using the computer in university teaching	3.82	0.83	10	3.51	0.95	26.5
46.	Improved skills in preparing materials for programmed, multi-media approaches to teaching	3.91	0.75	8	3.53	0.94	23.5
47.	Improved skills in developing interpersonal relationships among students and staff	3.47	1.02	35	3.28	0.85	42
48.	Improved skills in making learning relevant for students	3.65	1.01	17	3.53	0.94	23.5
49.	Improved skills in using case studies, games and simulation in teaching	3.53	1.13	28	3.49	0.94	28
50.	Improved skills in using audio-visual equipment and materials in teaching and learning	3.71	0.91	13.5	3.81	0.92	11.5
51.	Improved skills in Bahasa Malaysia in teaching	4.09	0.87	3	4.23	0.93	1

Item No	Objective	Administrators N=34 MS	SD	Rank	Instructors N=135 MS	SD	Rank
52.	Improved skills in questioning techniques	3.50	0.90	31.5	3.38	0.77	31.5
53.	Improved skills in teaching reasoning and creative thinking	3.88	0.84	9	3.82	0.85	10
54.	Improved skills in conducting research in your field	3.44	0.89	38	3.51	0.90	26.5
55.	Improved basic knowledge within your area of specialization	3.09	1.08	54.5	3.33	1.02	36.5
56.	Improved diction and projection	3.03	0.94	58	3.16	0.81	50
57.	Improved methods for evaluating instruction for students	3.47	0.79	35	3.47	0.84	29
58.	Developing an awareness of your responsibility towards colleagues and professional associations	3.18	0.90	48.5	3.27	0.89	44
59.	Developing a commitment to the goals of your university	3.24	0.74	44	3.25	0.85	46.5
60.	Developing a sensitivity for students' emotional and social needs	3.29	0.72	42.5	2.87	1.01	57
61.	Developing a sensitivity for students' cultural differences	3.09	1.14	54.5	2.67	1.04	62

Item No	Objective	Administrators N=34 MS	SD	Rank	Instructors N=135 MS	SD	Rank
62.	Developing strategies for evaluating instructional objectives	3.59	0.93	23	32.3	0.84	48
63.	Developing strategies which will enable students to participate in designing their learning experiences	3.71	0.87	13.5	3.25	0.97	46.5

***Type of Objective**
IM: Instructional methodology
CF: Contextual factors
SN: Student needs
CE: Content expertise

Table 38

Mean Demand Scores of Perceived Need for Organizational Arrangements by Each Participating Faculty /Centre (N=169)

Item No	Organizational Arrangements	Grp 1* N=24 MS	SD	Grp 2* N=6 MS	SD	Grp 3* N=19 MS	SD	Grp 4* N=14 MS	SD	Grp 5* N=10 MS	SD	Grp 6* N=6 MS	SD	Grp 7* N=38 MS	SD	Grp 8* N=33 MS	SD	Grp 9* N=21 MS	SD	Overall F	P	Scheffe (p≤.1)
1	Provisions encouraging participation in instructional development activities.																					
1.1	Special recognition of staff for excellence in teaching	7.63	1.13	7.83	1.17	8.05	0.78	7.57	0.85	7.90	0.88	7.67	1.03	7.92	0.84	7.79	0.89	7.52	0.98	0.71	0.69	
1.2.	Circulation of newsletter, articles, etc. that are pertinent to teaching improvement or staff development	8.13	1.23	7.50	1.38	8.05	0.85	7.64	0.93	8.30	1.25	7.67	1.51	7.69	0.79	7.67	1.19	8.05	1.07	0.97	0.46	
1.3.	Periods of time during the university year set aside for professional development	7.04	1.04	6.83	1.33	7.21	0.92	6.43	1.09	7.70	1.06	7.67	1.21	6.97	1.25	6.82	0.95	7.05	0.80	1.61	0.13	
1.4.	Periodic reviews of the performance of all staff staff members	5.21	1.10	5.83	0.75	5.95	1.35	5.43	1.28	4.90	0.88	5.83	1.47	5.31	1.64	4.55	1.37	6.19	1.29	3.34	0.00	8-9
1.5.	Sabbatical leaves with salary	5.46	0.51	5.50	0.84	5.58	0.84	5.29	0.61	6.10	0.74	5.83	0.98	5.92	1.08	5.55	0.71	5.86	1.11	1.51	0.16	
1.6.	Unpaid leaves for educational or developmental purposes	5.96	1.27	5.83	0.75	6.10	1.15	6.71	1.27	5.70	0.95	5.50	0.55	6.36	1.15	6.15	0.94	6.52	1.47	1.39	0.20	
1.7.	Reduced teaching load for first year staff	7.08	1.18	6.50	1.22	6.52	1.12	6.07	1.07	7.20	1.40	7.00	1.41	6.50	1.08	6.73	0.84	7.05	1.02	1.78	0.08	

Item No	Organizational Arrangements	Grp 1* N=24		Grp 2* N=6		Grp 3* N=19		Grp 4* N=14		Grp 5* N=10		Grp 6* N=6		Grp 7* N=38		Grp 8* N=33		Grp 9* N=21		Overall		Scheffe (p≤.1)
		MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	MS	SD	F	P	
1.8.	Temporary teaching load reductions to work on a new course, major course revision, or research area	7.38	1.24	6.83	1.47	7.42	1.26	7.36	1.34	7.50	1.43	6.67	1.21	6.64	1.07	7.36	1.08	7.48	1.33	1.62	0.12	
1.9.	Travel grants to refresh or update knowledge in a particular field	7.33	1.20	7.33	0.82	7.42	1.07	7.07	1.07	7.40	0.84	7.17	0.75	7.83	0.77	7.52	1.09	7.62	1.16	1.03	0.42	
1.10.	Travel funds available to attend professional conferences	6.83	0.96	7.00	0.89	7.32	0.95	7.07	1.07	7.10	0.32	7.50	0.84	7.25	0.97	6.97	0.77	7.10	1.00	0.76	0.64	
1.11.	Visiting scholars programme that brings people to the campus for short or long periods	6.46	1.06	7.00	0.89	6.95	1.03	6.50	0.94	6.70	0.82	6.33	0.82	6.58	0.81	6.09	0.98	6.33	0.97	1.72	0.97	
1.12.	Campus committees on staff development	7.46	1.22	6.67	1.21	7.53	1.02	7.29	1.07	7.70	0.82	7.67	0.82	7.61	0.69	7.39	1.00	7.57	1.12	0.80	0.61	
2.	Times at which instructional development activities are held:																					
2.1.	During university term	6.58	1.18	6.50	0.84	6.68	1.25	6.21	1.31	6.60	0.97	6.83	1.33	6.94	1.01	6.12	0.99	6.62	0.92	1.52	0.16	
2.2.	During the long vacation	6.17	1.13	6.83	0.75	7.58	1.02	6.79	1.31	7.00	1.05	6.83	0.75	7.08	0.91	7.33	0.92	6.62	1.32	3.46	0.00	1-3,1-8
3.	Sources of expertise for instructional development activities:																					
3.1.	The university's own academic staff	7.17	1.40	6.83	1.33	7.11	0.86	7.36	0.84	7.00	1.41	7.00	0.89	7.17	0.88	7.27	1.01	7.00	1.14	0.28	0.97	
3.2.	Specialist consultants from outside the university	6.29	1.16	6.83	0.75	7.26	0.87	6.07	1.07	6.30	0.95	6.50	0.84	6.56	0.61	5.97	1.05	6.57	0.98	3.49	0.00	3-8
3.3.	Deans of faculties	6.42	1.06	6.17	0.98	7.11	1.24	5.86	1.41	7.00	1.05	6.50	1.05	6.17	0.77	6.33	1.02	6.48	1.03	2.26	0.03	
3.4.	Heads of Departments/ Divisions, Directors of Centres	6.42	1.28	6.67	1.63	7.26	1.33	6.29	1.38	7.30	1.42	6.67	1.21	7.03	1.18	7.06	1.14	6.67	1.46	1.35	0.23	

Item No	Organizational Arrangements	Grp 1* N=24 MS	 SD	Grp 2* N=6 MS	 SD	Grp 3* N=19 MS	 SD	Grp 4* N=14 MS	 SD	Grp 5* N=10 MS	 SD	Grp 6* N=6 MS	 SD	Grp 7* N=36 MS	 SD	Grp 8* N=33 MS	 SD	Grp 9* N=21 MS	 SD	Overall F	 P	Scheffé (p≤.1)
4.	Organizational arrangements used for implementing instructional development activities:																					
4.1.	Workshops (small gathering, structured activities)	6.83	1.27	7.00	0.89	7.53	1.02	6.79	0.98	7.40	1.08	7.17	0.75	7.17	0.61	6.55	1.42	6.71	0.90	1.96	0.05	
4.2.	Field experience (temporary placement in arelated organization)	7.00	1.38	6.83	0.75	7.58	0.84	7.36	1.22	8.10	1.10	7.83	0.98	7.03	0.65	6.61	0.86	7.33	0.86	3.80	0.00	5-8
4.3.	Conference (large gathering, structured activities)	6.46	1.14	6.50	1.22	7.00	1.05	6.36	1.50	6.60	0.70	6.17	0.75	7.22	0.96	5.94	1.14	6.67	1.11	3.52	0.00	7-8
4.4.	Internship (first-hand experience under guidance)	6.75	1.19	6.67	1.03	7.21	1.03	6.93	1.14	7.60	1.71	6.83	1.33	6.78	0.99	6.42	0.87	7.00	0.95	1.65	0.12	
4.5.	Interview (close interpersonal interaction designed to improve understanding)	6.58	1.10	6.50	1.22	7.16	0.96	6.79	0.89	7.20	1.23	6.67	0.82	6.81	0.86	6.70	0.92	7.00	1.00	0.91	0.51	
5.	Sources by which your awareness of instructional development needs has been influenced:																					
5.1.	Students	5.58	0.83	5.33	0.52	5.68	0.58	6.00	1.11	5.30	1.25	5.83	0.75	5.92	0.81	5.58	1.15	5.58	0.81	0.98	0.45	
5.2.	Administrators	6.29	0.95	6.83	1.47	6.16	0.76	5.57	0.94	6.10	1.37	6.33	1.37	5.75	1.32	5.61	0.90	5.95	1.16	1.73	0.10	
5.3.	Lecturers (i.e. academic staff)	6.17	0.82	6.17	0.75	6.37	0.96	6.07	0.92	5.80	1.29	6.33	1.03	6.36	0.93	5.91	0.88	6.14	0.79	0.80	0.60	
5.4.	Academic staff committee	7.17	1.40	6.83	1.17	7.21	1.08	6.43	0.94	7.30	1.77	7.00	0.89	7.22	1.12	7.30	0.88	6.90	1.22	0.95	0.48	
6.	The extent to which the importance of instructional development activities has been recognized by the university	7.25	1.39	6.83	1.17	7.53	0.77	7.00	0.96	7.00	0.81	7.50	1.22	7.47	0.97	7.30	0.85	7.43	1.03			
	Overall	6.88	0.70	6.64	0.84	7.02	0.44	6.58	0.47	6.92	0.85	6.80	0.47	6.83	0.38	6.59	0.37	6.82	0.56	1.70	0.10	

Faculty/Centre

Gr1*: Arts & Soc.SC.
Gr2*: Dentistry
Gr3*: Econs. & Pub.Admin.
Gr4*: Education
Gr5*: Engineering
Gr6*: Law
Gr7*: Medicine
Gr8*: Science
Gr9*: Centre for Foundation Studies in Sc. & Lang.Centre

APPENDIX C

CORRESPONDENCE

AL.Ramaiah

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2G5

March 23, 1982

Yang Mulia Royal Prof. Ungku A. Aziz
Vice-Chancellor
University of Malaya
Kuala Lumpur
Malaysia

Dear Royal Prof.Ungku Aziz:

I am a trainee under the Academic Staff Training Scheme of the University of Malaya and, currently pursuing my Ph.D. degree in Educational Administration at the University of Alberta, Edmonton, Canada. My major area of research is in the field of higher education.

The subject of academic staff development is emerging as an important concern in university administration; yet, little research has been conducted on this topic which can serve as a meaningful basis for development in this area.

This letter is a request for your approval of a study entitled "The Need for Academic Staff Development as Perceived by Academic Staff and Administrators at the University of Malaya."

The main purpose of this study is to identify the types of knowledge and skills university academic staff and administrators feel are necessary as part of a staff development programme. The study will also attempt to identify what academic staff and administrators consider to be the best methods for acquiring the needed skills and knowledge. In other words, the focus of the study is on the "what" and "how" of academic staff development.

It is anticipated that all eight faculties and two centres, namely, the Centre for Foundation Studies in Science and Language Centre of the University of Malaya will be involved in a comprehensive study. The data will be collected by such means as interviews and questionnaires, details of which will be developed in consultation with my advisor and supervisory committee.

It is expected that this study, in addition to providing the data for my doctoral dissertation, will be valuable to the University of Malaya as an information base in planning for academic staff development within the university. A statistical summary of the results will be forwarded to you personally.

I would appreciate your response to this request at your earliest convenience. Upon receipt of your approval I will make further arrangements to proceed with my study.

Thank you for your consideration.

Yours very sincerely,

AL. Ramaiah
(AL.Ramaiah)

c.c. Prof.James M.Small, Advisor, Dept. of Ed.Admin., University of Alberta

NAIB-CANSELOR

CANSELERI
UNIVERSITI MALAYA, KUALA LUMPUR
MALAYSIA
Telefon 560022 - Sam. 200 Kawat UNIVSEL

6th April 1982

Mr Al. Ramaiah
Faculty of Education
Department of Educational Administration
The university of Alberta
Edmonton
CANADA

Dear Mr Ramaiah,

Thank you for your letter dated March 23, 1982. I do remember our discussion quite vividly. This letter will serve as an indication of my approval for you to conduct a study entitled, "The Need for Academic Staff Development as Perceived by Academic Staff and Administrators at the University of Malaya".

Maybe when the time comes I will provide you with some additional background so that you can see how we have implemented policies for academic staff development during the past decade. You may also like to remember to include a part on language training since this is a critical aspect of staff development in the universities in Malaysia.

I am reminded by my administrators to indicate to you that this approval does not in any way commit the University to financial expenditures. When the time comes, I will try to help you as best I can from various sources that are frequently willing to support research of this nature.

Wishing you every success,

Yours sincerely,

ROYAL PROFESSOR UNGKU A AZIZ
Vice Chancellor

UAA/al.

Al Ramaiah
c/o Dept. of Educational Adminstration
University of Alberta
Edmonton, Alberta
Canada.

2 August 1982.

Dear

I am a doctoral student in the Department of Educational Administration at the University of Alberta, Edmonton, Canada.

For my dissertation, I am investigating the "Perceived Needs for Instructional Development at the University of Malaya."

The enclosed questionnaire is the instrument that I propose to use for my study, and I would appreciate your assistance in:

a. completing it,

b. stating the time you have taken to complete it,

c. criticizing any aspect of content, instructions or format which detracted from clarity or relevance,

d. suggesting items which should be changed, deleted or added and,

e. returning the completed instrument by campus mail in the enclosed self-addressed envelope by 16 August 1982.

Thank you in anticipation for your assistance.

Yours sincerely,

(Al.Ramaiah)

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2G5

October 06,1982

Dear

Re: UNIVERSITY INSTRUCTIONAL DEVELOPMENT SURVEY

I am a Ph.D. student in the Department of Educational Administration at the University of Alberta,Edmonton,Canada,and I am in the process of doing my thesis on "Perceived Needs of Academic Staff for Instructional Development at the University of Malaya."

My thesis committee has approved the study and permission has been granted by the Vice-Chancellor of the University of Malaya,Royal Prof.Ungku Aziz,to conduct the study at the University of Malaya.

The main purpose of this study is to identify the kinds of knowledge and skills university lecturers feel they need in order to fulfill the requirements of their instructional (teaching) role. The study will also identify what lecturers consider to be the most appropriate methods for acquiring needed knowledge and skills,and their perceptions of organizational arrangements that facilitate instructional development.

You have been selected as part of a random sample,and I hope I can count on your help to fill out and return the enclosed questionnaire. The questionnaire is quite long but I hope that you will be able to find time to complete it. Respondents in the pilot study required approximately thirty minutes to complete it.

Each questionnaire is given an identifying code number to be used only to record returned questionnaires. Complete anonymity in the analysis of data and the reporting of findings is assured.

I would appreciate your assistance and cooperation in completing the enclosed questionnaire and returning it to me by campus mail in the enclosed self-addressed envelope by October 20,1982.

The success and future usefulness of this survey depends,of course,on a high rate of response (ideally 100 per cent). Your help in attaining this goal would be very much appreciated.

Thanking you in anticipation for your cooperation.

Yours sincerely,

(Al. Ramaiah)

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2G5

October 25 ,1982

Dear

On October 06 ,1982 I mailed a questionnaire to you. This questionnaire relates to a study of perceived needs of academic staff for instructional development at the University of Malaya.

The results of this study should prove useful to individuals and universities in designing instructional development programmes/ activities for university academic staff in Malaysia.

If you have already completed and returned the questionnaire, please accept my gratitude. If you have not yet returned the completed questionnaire,I would appreciate your doing so. It will take only 30 minutes of your time to do it,and you are assured that your response will be treated confidentially.

Should you need any further information please feel free to call me at: 572433 any morning between the hours of 8:00 and 10:00.

Thank you in anticipation for your cooperation.

Yours sincerely,

(Al. Ramaiah)

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2G5

November 03 ,1982

Dear

Sometime in October a questionnaire which related to a study of perceived needs of academic staff for instructional development at the University of Malaya,was mailed to you. To date I have not received your completed copy of the questionnaire.

If you have already completed and returned your copy of the questionnaire,I wish to thank you for your cooperation. However, in case you have mislaid the first questionnaire,I am enclosing a second copy which I am requesting that you complete and return to me by November 17 ,1982.

It is important that I receive your completed questionnaire,as a high rate of return will add to the validity of my study. Therefore, may I ask that you complete the enclosed questionnaire and return it to me in the enclosed self-addressed envelope without delay?

Thank you for your assistance.

Yours sincerely,

(Al.Ramaiah)